

=> file reg

FILE 'REGISTRY' ENTERED AT 17:18:29 ON 23 JAN 2004
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STRUCTURE FILE UPDATES: 22 JAN 2004 HIGHEST RN 640654-81-5
DICTIONARY FILE UPDATES: 22 JAN 2004 HIGHEST RN 640654-81-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d his full

(FILE 'HOME' ENTERED AT 16:11:36 ON 23 JAN 2004)

FILE 'REGISTRY' ENTERED AT 16:12:08 ON 23 JAN 2004

L1 66284 SEA 16.138.6/RID
L2 3795 SEA 16.145.6/RID
D L2 10 RSD
L3 94421 SEA 16.136.10/RID
L4 60178 SEA 333.84.17/RID
L5 1107 SEA 333.94.9/RID
L6 122962 SEA 333.79.30/RID
L7 344101 SEA L1 OR L2 OR L3 OR L4 OR L5 OR L6

FILE 'LREGISTRY' ENTERED AT 16:17:35 ON 23 JAN 2004
ACT EGW636/Q

L8

STR

ACT EGW636A/Q

L9

STR

ACT EGW636B/Q

Transcript 2
All ring structures
encompassed in
Claim 28

L10

STR
-----ACT EGW636C/Q

L11

STR
-----ACT EGW636D/Q

L12

STR
-----ACT EGW636E/Q

L13

STR

FILE 'REGISTRY' ENTERED AT 16:20:56 ON 23 JAN 2004
L14 50 SEA SUB=L7 SSS SAM (L8 OR L9 OR L10 OR L11 OR L12 OR
L13)

FILE 'HCAPLUS' ENTERED AT 16:23:44 ON 23 JAN 2004

L15 278887 SEA WANG ?/AU
L16 9823 SEA NAGY ?/AU
L17 174 SEA L15 AND L16
L18 9848 SEA WANG Q?/AU
L19 706 SEA NAGY S?/AU
L20 19 SEA L18 AND L19
L21 QUE OXID# OR OXIDN# OR OXIDI? OR OXIDA?
L22 1 SEA L20 AND L21
D ALL
SELECT L22 1 RN

FILE 'REGISTRY' ENTERED AT 16:26:14 ON 23 JAN 2004

L23 10 SEA (159159-41-8/BI OR 201815-03-4/BI OR 22122-36-7/BI
OR 4031-15-6/BI OR 497-23-4/BI OR 69556-70-3/BI OR
87-41-2/BI OR 9002-86-2/BI OR 9002-88-4/BI OR 9003-07-0/B
I)
D SCAN
L24 7 SEA L23 NOT PMS/CI
D L14 QUE STAT
L25 SCR 1918 OR 2043 OR 2049 OR 2127 OR 2040 OR 1929
L26 50 SEA SUB=L7 SSS SAM (L8 OR L9 OR L10 OR L11 OR L12 OR
L13) NOT L25
D SAV
D QUE STAT
L27 143956 SEA SUB=L7 SSS FUL (L8 OR L9 OR L10 OR L11 OR L12 OR
L13) NOT L25
D SAV

DEL E?/Q
SAVE TEMP L27 EGW636/A

L28 FILE 'HCAPLUS' ENTERED AT 16:49:14 ON 23 JAN 2004
195924 SEA L27

L29 FILE 'LCA' ENTERED AT 16:51:00 ON 23 JAN 2004
926 SEA ANTIOXID? OR (ANTI OR INHIBIT? OR HINDER? OR IMPED?
OR ARREST? OR REDUC? OR REDN# OR RESIST? OR SUPPRESS? OR
RETARD? OR PROHIBIT? OR PREVENT? OR BLOCK? OR ELIMINAT?
OR LOW OR LOWER? OR DIMINISH? OR DECREAS? OR LESS?) (2A) (O
XIDA? OR OXIDI? OR OXIDN# OR OXID#)

L30 FILE 'HCAPLUS' ENTERED AT 16:56:14 ON 23 JAN 2004
384096 SEA ANTIOXID? OR (ANTI OR INHIBIT? OR HINDER? OR IMPED?
OR ARREST? OR REDUC? OR REDN# OR RESIST? OR SUPPRESS? OR
RETARD? OR PROHIBIT? OR PREVENT? OR BLOCK? OR ELIMINAT?
OR LOW OR LOWER? OR DIMINISH? OR DECREAS? OR LESS?) (2A) (O
XIDA? OR OXIDI? OR OXIDN# OR OXID#)

L31 142977 SEA PRESERV?
L32 1337590 SEA STABILIZ? OR STABILIS? OR STABIL? OR STABLE#
L33 13750 SEA L28 AND L30
L34 3398 SEA L28 AND L31
L35 17400 SEA L28 AND L32
L36 189 SEA L33 AND L34 AND L35
SAV L36 EGW636A/A
L37 1485 SEA NONPHENOL? OR NON(A) PHENOL?
L38 7 SEA (L33 OR L34 OR L35) AND L37
L39 1 SEA L38 AND L22
L40 16613 SEA L29(3A) (POLYM? OR COPOLYM? OR HOMOPOLYM? OR TERPOLYM?
OR RESIN?)
L41 1345 SEA PRESERV?(2A) (POLYM? OR COPOLYM? OR HOMOPOLYM? OR
TERPOLYM? OR RESIN?)
L42 50115 SEA L32(2A) (POLYM? OR COPOLYM? OR HOMOPOLYM? OR TERPOLYM?
OR RESIN?)
L43 359 SEA L28 AND L40
L44 27 SEA L28 AND L41
L45 1215 SEA L28 AND L42
L46 44 SEA L43 AND L45
L47 0 SEA L43 AND L44 AND L45
L48 1 SEA L43 AND L37
L49 1 SEA L45 AND L37
L50 QUE (35 OR 36 OR 37 OR 38)/SC,SX
L51 203 SEA L43 AND L50
L52 6 SEA L44 AND L50
L53 864 SEA L45 AND L50
L54 4 SEA L36 AND L50
SAV L29 ANTIOXID/Q

ACT ANTIOXID/Q

L*** DEL QUE ANTIOXID? OR (ANTI OR INHIBIT? OR HINDER? OR IMPED?

L*** DEL 384096 S L55
L55 8438 SEA ?PHTHALID?
L56 14 SEA (L36 OR L43 OR L44 OR L45) AND L55

FILE 'REGISTRY' ENTERED AT 17:14:05 ON 23 JAN 2004
L57 3 SEA L23 NOT L24

FILE 'HCAPLUS' ENTERED AT 17:14:28 ON 23 JAN 2004
L58 288302 SEA L57
L59 259 SEA (L36 OR L43 OR L44 OR L45) AND L58
L60 6 SEA L36 AND L58
L61 71 SEA L43 AND L58
L62 5 SEA L44 AND L58
L63 195 SEA L45 AND L58
L64 38 SEA L38 OR L48 OR L49 OR L52 OR L54 OR L56 OR L60 OR L62

L65 25 SEA L38 OR L48 OR L49 OR L52 OR L54 OR L60 OR L62
L66 13 SEA L56 NOT L65
L67 18 SEA L44 NOT (L65 OR L66)

FILE 'REGISTRY' ENTERED AT 17:18:29 ON 23 JAN 2004

FILE HOME

FILE REGISTRY

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DICTIONARY FILE UPDATES: 22 JAN 2004 HIGHEST RN 640654-81-5

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<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE LREGISTRY
LREGISTRY IS A STATIC LEARNING FILE

FILE HCAPLUS

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FILE COVERS 1907 - 23 Jan 2004 VOL 140 ISS 5
FILE LAST UPDATED: 22 Jan 2004 (20040122/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

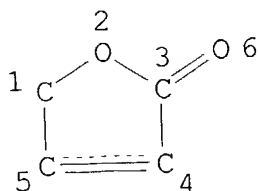
FILE LCA
LCA IS A STATIC LEARNING FILE

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 127 que stat

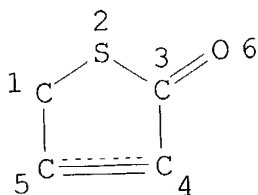
L1	66284	SEA	FILE=REGISTRY	16.138.6/RID
L2	3795	SEA	FILE=REGISTRY	16.145.6/RID
L3	94421	SEA	FILE=REGISTRY	16.136.10/RID
L4	60178	SEA	FILE=REGISTRY	333.84.17/RID
L5	1107	SEA	FILE=REGISTRY	333.94.9/RID
L6	122962	SEA	FILE=REGISTRY	333.79.30/RID
L7	344101	SEA	FILE=REGISTRY	L1 OR L2 OR L3 OR L4 OR L5 OR L6
L8		STR		



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 6

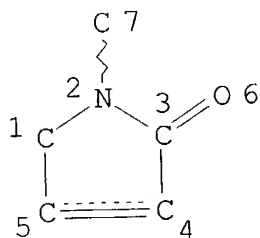
STEREO ATTRIBUTES: NONE
L9 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 6

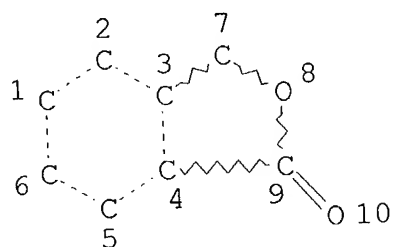
STEREO ATTRIBUTES: NONE
L10 STR



NODE ATTRIBUTES:
NSPEC IS RC AT 7
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 7

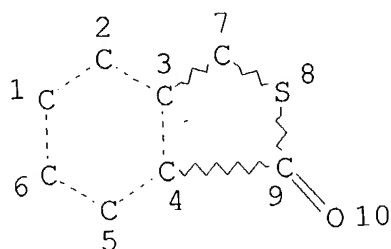
STEREO ATTRIBUTES: NONE
L11 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 10

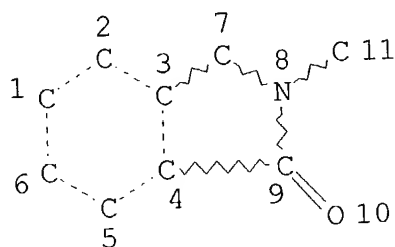
STEREO ATTRIBUTES: NONE
L12 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
L13 STR



NODE ATTRIBUTES:

NSPEC IS RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L25 SCR 1918 OR 2043 OR 2049 OR 2127 OR 2040 OR 1929
L27 143956 SEA FILE=REGISTRY SUB=L7 SSS FUL (L8 OR L9 OR L10 OR L11
OR L12 OR L13) NOT L25

100.0% PROCESSED 144555 ITERATIONS
SEARCH TIME: 00.00.05

143956 ANSWERS

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 17:20:12 ON 23 JAN 2004
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FILE COVERS 1907 - 23 Jan 2004 VOL 140 ISS 5
FILE LAST UPDATED: 22 Jan 2004 (20040122/ED)

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=> d l65 1-25 cbib abs hitstr hitind

L65 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
2003:943786 Document No. 140:8799 Topical compositions containing corticosteroids and antifungal agents for the treatment of skin rashes, dermatosis and lesion. McCadden, Michael E. (USA). U.S. US

6656928 B1 20031202, 12 pp. (English). CODEN: USXXAM.
APPLICATION: US 2000-652381 20000831. PRIORITY: US 1999-PV152067
19990902.

AB A compn. for topical administration comprises (a) a corticosteroid, (b) a drying agent, and (c) a broad spectrum anti-fungal agent that treats both dermatophytes and yeast. Thus, a compn. contained hydrocortisone 1, clotrimazole 1, and calamine lotion 98%. One patient presented with balanoposthitis. The patient had a red glistening shiny patch on his glans penis, consistent with both balanoposthitis and a psoriasis-form dermatitis. He had a chronic rash on his penis for 5 yr, which did not clear after circumcision. The compn. cleared the rash in less than a month.

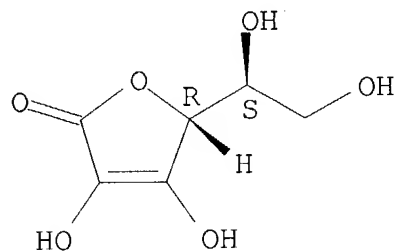
IT 50-81-7, Vitamin C, biological studies 9002-88-4,
Polyethylene

(topical compns. contg. corticosteroids and antifungals for
treatment of skin rashes and dermatosis and lesion)

RN 50-81-7 HCAPLUS

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9002-88-4 HCAPLUS

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1

CMF C2 H4

$\text{H}_2\text{C}=\text{CH}_2$

IC ICM A61K031-59

ICS A61K031-56; A01N043-50

NCL 514167000; 514171000; 514396000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

IT **Antioxidants**

Beeswax
 Buffers
 Dermatitis
 Drying agents
 Eczema
 Emulsifying agents
 Fungicides
 Human
 Humectants
 Odor and Odorous substances
 Perfumes

Preservatives

Pruritus
 Psoriasis
 Seborrhea
 Skin, disease
 Skin-infecting fungi
 Solvents

Stabilizing agents

Thickening agents
 Tinea (skin disease)
 Viscosity
 Yeast

(topical compns. contg. corticosteroids and antifungals for treatment of skin rashes and dermatosis and lesion)

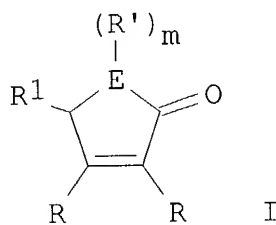
IT 50-02-2, Dexamethasone 50-03-3, Hydrocortisone acetate 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-70-4, Sorbitol, biological studies 50-81-7, Vitamin C, biological studies 53-06-5, Cortisone 56-81-5, Glycerin, biological studies 57-11-4, Stearic acid, biological studies 57-13-6, Urea, biological studies 57-55-6, Propylene glycol, biological studies 57-88-5, Cholesterol, biological studies 58-73-1 59-50-7, 4-Chloro-m-cresol 60-33-3, Linoleic acid, biological studies 62-54-4, Calcium acetate 64-17-5, Ethyl alcohol, biological studies 64-19-7, Acetic acid, biological studies 65-85-0, Benzoic acid, biological studies 67-63-0, Isopropyl alcohol, biological studies 67-73-2, Fluocinolone acetonide 76-22-2, Camphor 76-25-5, Triamcinolone acetonide 77-92-9D, Citric acid, esters with fatty alcs. 79-81-2, Retinyl palmitate 83-43-2, Methylprednisolone 83-88-5, Riboflavin, biological studies 89-78-1, Menthol 94-09-7, Benzocaine 94-13-3, Propylparaben 94-26-8, Butylparaben 99-76-3, Methylparaben 100-46-9D, Benzylamine, derivs. 100-51-6, Benzyl alcohol, biological studies 106-69-4, 1,2,6-Hexanetriol 107-11-9D, Allylamine, derivs. 107-41-5, Hexylene glycol 108-32-7, Propylene carbonate 108-95-2, Phenol, biological studies 110-27-0, Isopropyl myristate 110-44-1, Sorbic acid 111-01-3, Squalane 112-80-1, Oleic acid,

biological studies 112-92-5, Stearyl alcohol 115-77-5D,
Pentaerythritol, esters with fatty acids 121-79-9, Propyl gallate
125-10-0, Prednisone acetate 127-47-9, Retinyl acetate 128-37-0,
Butylated hydroxytoluene, biological studies 139-33-3, Disodium
edetate 140-65-8, Pramoxine 142-91-6, Isopropyl palmitate
151-21-3, Sodium lauryl sulfate, biological studies 288-32-4D,
Imidazole, derivs. 303-98-0, Coenzyme Q10 356-12-7, Fluocinonide
378-44-9, Betamethasone 382-67-2, Desoximetasone 557-04-0,
Magnesium stearate 557-05-1, Zinc stearate 638-94-8, Desonide
1314-13-2, Zinc oxide, biological studies 1321-10-4, Chlorocresol
1323-39-3, Propylene glycol stearate 1338-39-2, Sorbitan
monolaurate 1338-41-6, Sorbitan monostearate 1338-43-8, Sorbitan
monooleate 1406-16-2, Vitamin D 1406-18-4, Vitamin E
1524-88-5, Flurandrenolide 2002-29-1, Flumethasone pivalate
2152-44-5, Betamethasone valerate 3093-35-4, Halcinonide
4080-31-3, Quaternium-15 5534-13-4 5593-20-4, Betamethasone
dipropionate 6677-98-1, Hydrocortisone propionate 6938-94-9,
Diisopropyl adipate 7440-66-6, Zinc, biological studies
7631-90-5, Sodium bisulfite 7664-38-2, Phosphoric acid, biological
studies 7681-57-4, Sodium metabisulfite 7722-64-7, Potassium
permanganate 7758-98-7, Copper sulfate, biological studies
7761-88-8, Silver nitrate, biological studies 8007-43-0, Sorbitan
sesquiolate 8011-96-9, Calamine 8050-81-5, Simethicone
9002-88-4, Polyethylene 9004-53-9, Dextrin 9004-64-2,
Hydroxypropyl cellulose 9004-82-4, Sodium laureth sulfate
9004-95-9, Ceteth 20 9004-99-3, Polyethylene glycol monostearate
9005-00-9, Steareth 9005-08-7, Polyethylene glycol distearate
9005-25-8, Starch, biological studies 9005-64-5, Polysorbate 20
9005-65-6, Polysorbate 80 9005-66-7, Polysorbate 40 9005-67-8,
Polysorbate 60 9006-65-9, Dimethicone 9007-16-3, Carbomer 934
9087-61-0, Aluminum starch octenylsuccinate 11099-07-3, Glyceryl
stearate 11103-57-4, Vitamin A 11138-66-2, Xanthan gum
12001-79-5, Vitamin K 12441-09-7D, Sorbitan, esters 13609-67-1,
Hydrocortisone butyrate 14807-96-6, Talc, biological studies
19045-66-0D, Thiocarbamic acid, derivs. 22298-29-9, Betamethasone
benzoate 23593-75-1, Clotrimazole 24634-61-5, Potassium sorbate
25013-16-5, Butylated hydroxyanisole 25122-46-7, Clobetasol
propionate 25231-21-4, Polyoxypropylene stearyl ether
25322-68-3, Polyethylene glycol 25322-68-3D, Polyethylene glycol,
fatty ethers 25496-72-4, Glyceryl monooleate 26266-57-9,
Sorbitan monopalmitate 27306-76-9 31566-31-1, Glyceryl
monostearate 33564-31-7, Diflorasone diacetate 34097-16-0,
Clocortolone pivalate 36653-82-4, Cetyl alcohol 37306-44-8D,
Triazole, derivs. 37342-64-6D, Pyridone, derivs. 51022-69-6,
Amcinonide 57524-89-7, Hydrocortisone valerate 57916-92-4,
Carbomer 934P 66734-13-2, Alclometasone dipropionate 66852-54-8,
Halobetasol propionate 73771-04-7, Prednicarbate 76050-42-5,
Carbomer 940 80474-14-2, Fluticasone propionate 83919-23-7,

Mometasone furoate 135843-95-7, Polypropylene glycol oleate
627846-14-4 627910-32-1, Amphoteric 9
(topical compns. contg. corticosteroids and antifungals for
treatment of skin rashes and dermatosis and lesion)

L65 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
2003:334673 Document No. 138:339051 **Inhibiting**
polymer oxidation using non-
phenolic antioxidants. Wang, Qi; Nagy, Sandor
(USA). U.S. Pat. Appl. Publ. US 2003083405 A1 20030501, 6 pp.,
Cont.-in-part of U.S. Ser. No. 223,710. (English). CODEN: USXXCO.
APPLICATION: US 2002-65636 20021105. PRIORITY: US 1998-223710
19981230.

GI

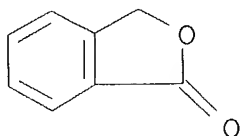


AB The oxidn. of a polymer is inhibited by adding to the polymer about
0.005-10 phr of an **antioxidant** of I (in non-polymeric
form) type (E is O, S, or N, R is H, R', OR', SR', OP(R')2, COR',
each R is independently selected from R1, alkylenyl from C1 to C12 ,
aminoalkyl from C1 to C12 , and hydroxyalkyl from C1 to C12 , R' is
alkyl from C1 to C12 or aryl, alkylaryl, or aralkyl from C6 to C12 ,
R' is G, GO, GS, GNH, NHG, NHGO, NHGNH, NHGS, OG, OGO, OGNH, OGS,
where G is alkylenyl from C7 to C12, or arylalkylenyl from C7 to C12
, m is 0 if E is O or S and is 1 if E is N, and two R groups can
join from an alicyclic ring or an arom. ring or an R group and an R1
group can join to form an alicyclic ring). The polymer can be PVC,
a polycarbonate, a polyether, polyethylene, polypropylene, or a
mixt. thereof when the **antioxidant** is not phthalide and
can be PVC, a polycarbonate, a polyether, or a mixt. thereof when
the **antioxidant** is phthalide.

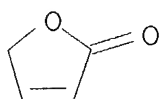
IT 87-41-2, Phthalide 497-23-4D, 2(5H)Furanone,
derivs. 22122-36-7, 3-Methyl-2(5H)furanone
69556-70-3, 4-Methoxy-2(5H)furanone
(nonphenolic antioxidants for use in
polymer compns.)

RN 87-41-2 HCAPLUS

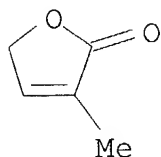
CN 1(3H)-Isobenzofuranone (9CI) (CA INDEX NAME)



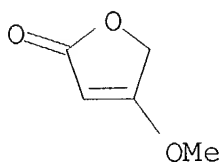
RN 497-23-4 HCAPLUS
 CN 2(5H)-Furanone (8CI, 9CI) (CA INDEX NAME)



RN 22122-36-7 HCAPLUS
 CN 2(5H)-Furanone, 3-methyl- (8CI, 9CI) (CA INDEX NAME)



RN 69556-70-3 HCAPLUS
 CN 2(5H)-Furanone, 4-methoxy- (9CI) (CA INDEX NAME)



IC ICM C08K005-00
 NCL 524081000; 524084000; 524104000; 524113000; 524116000; 524094000
 CC 37-2 (Plastics Manufacture and Processing)
 ST furanone pyrrolinone **nonphenolic antioxidant**
polymer plastic compn
 IT **Antioxidants**
 (nonphenolic antioxidants for use in
 polymer compns.)
 IT Polycarbonates, uses

Polyethers, uses

(nonphenolic antioxidants for use in
polymer compns.)

IT 87-41-2, Phthalide 497-23-4D, 2(5H)Furanone,
derivs. 4031-15-6D, 3-Pyrrolin-2-one, derivs. 22122-36-7
, 3-Methyl-2(5H)furanone 69556-70-3, 4-Methoxy-
2(5H)furanone 159159-41-8D, Thiophenone, derivs. 201815-03-4,
HP-136

(nonphenolic antioxidants for use in
polymer compns.)

IT 9002-86-2, PVC 9002-88-4, Polyethylene 9003-07-0, Polypropylene
(nonphenolic antioxidants for use in
polymer compns.)

L65 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
2003:124006 Document No. 138:152602 Preservatives containing
carbonates for fruits and vegetables. Nemoto, Yasushi; Mori,
Hisashi; Kuwahara, Tadashi (Bridgestone Corp., Japan). Jpn. Kokai
Tokkyo Koho JP 2003047399 A2 20030218, 8 pp. (Japanese). CODEN:
JKXXAF. APPLICATION: JP 2001-241031 20010808.

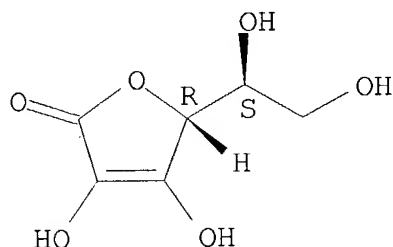
AB The preservatives comprise core particles contg. carbonates and/or
hydrogen carbonates coated with porous polymer films. Granules
contg. NaHCO₃ 65, citric acid 20, and hydroxypropyl cellulose 15 wt.
parts were spray-coated with a suspension contg. poly(methacrylic
acid) resin fine powder and the resulting coated particles were
heat-treated to give porous film-coated CO₂-emitting particles,
which were supported on SF 06 (flexible polyurethane foam) with an
acrylic binder to give a preservative. The vitamin C content of
spinach after 4-day storage at 10.degree. in a polyethylene bag
contg. the preservative was 55 mg/100 g-spinach, while that of a
control stored without the preservative was 15 mg/100 g-spinach.

IT 50-81-7, Ascorbic acid, biological studies
(preservatives contg. porous polymer
film-coated particles contg. carbonates and acids for fruits and
vegetables)

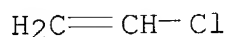
RN 50-81-7 HCAPLUS

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 9002-86-2, Poly(vinyl chloride)
 (preservatives contg. porous polymer
 film-coated particles contg. carbonates for fruits and
 vegetables)
 RN 9002-86-2 HCAPLUS
 CN Ethene, chloro-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 75-01-4
 CMF C2 H3 Cl



IC ICM A23B007-14
 ICS A01N003-02; A23B007-16
 CC 17-6 (Food and Feed Chemistry)
 ST vegetable preservative carbonate porous polymer
 coating; fruit preservative carbonate porous
 polymethacrylate coating
 IT Acrylic polymers, biological studies
 (adhesive; preservatives contg. porous polymer
 film-coated particles contg. carbonates for fruits and
 vegetables)
 IT Containers
 (food, gas-permeable; preservatives contg. porous
 polymer film-coated particles contg. carbonates for
 fruits and vegetables)
 IT Plastic foams
 (polyurethane, support; preservatives contg. porous
 polymer film-coated particles contg. carbonates for
 fruits and vegetables)
 IT Acids, biological studies
 Carboxylic acids, biological studies
 Phosphates, biological studies

- (**preservatives** contg. porous **polymer**
film-coated particles contg. carbonates and acids for fruits and
vegetables)
- IT Adhesives
Food preservatives
(**preservatives** contg. porous **polymer**
film-coated particles contg. carbonates for fruits and
vegetables)
- IT Bicarbonates
Carbonates, biological studies
Fluoropolymers, biological studies
Polyamides, biological studies
Polycarbonates, biological studies
Polyesters, biological studies
Polyimides, biological studies
Polyolefins
Polyoxymethylenes, biological studies
Polysulfones, biological studies
Polyurethanes, biological studies
(**preservatives** contg. porous **polymer**
film-coated particles contg. carbonates for fruits and
vegetables)
- IT Antibacterial agents
Fungicides
(silver, vapor-deposited on porous **polymer** film;
preservatives contg. porous **polymer** film-coated
particles contg. carbonates for fruits and vegetables)
- IT Nets
Nonwoven fabrics
Textiles
(support; **preservatives** contg. porous **polymer**
film-coated particles contg. carbonates for fruits and
vegetables)
- IT 496842-43-4, SF 06
(foams, support; **preservatives** contg. porous
polymer film-coated particles contg. carbonates for
fruits and vegetables)
- IT 50-81-7, Ascorbic acid, biological studies 56-86-0,
Glutamic acid, biological studies 57-10-3, Palmitic acid,
biological studies 57-11-4, Stearic acid, biological studies
65-85-0, Benzoic acid, biological studies 77-92-9, Citric acid,
biological studies 87-69-4, Tartaric acid, biological studies
87-73-0, Saccharic acid 107-35-7, Taurine 144-62-7, Oxalic acid,
biological studies 6915-15-7, Malic acid 7664-38-2, Phosphoric
acid, biological studies
(**preservatives** contg. porous **polymer**
film-coated particles contg. carbonates and acids for fruits and
vegetables)

IT 144-55-8, Sodium hydrogen carbonate, biological studies 298-14-6
471-34-1, Calcium carbonate, biological studies 497-19-8, Sodium
carbonate, biological studies 546-93-0, Magnesium carbonate
554-13-2, Lithium carbonate 584-08-7, Potassium carbonate
9002-86-2, Poly(vinyl chloride) 9003-53-6, Polystyrene
9004-34-6, Cellulose, biological studies 25087-26-7,
Poly(methacrylic acid)

(preservatives contg. porous polymer
film-coated particles contg. carbonates for fruits and
vegetables)

IT 7440-22-4, Silver, biological studies
(vapor-deposited on porous polymer film;
preservatives contg. porous polymer film-coated
particles contg. carbonates for fruits and vegetables)

L65 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

2003:117625 Document No. 138:142519 Transdermal therapeutic system
(reservoir-TTS) for using pramipexole and ropinirole. Beier,
Cornelia; Wilhelm, Martina (Hexal AG, Germany). PCT Int. Appl. WO
2003011291 A1 20030213, 28 pp. DESIGNATED STATES: W: AE, AG, AL,
AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ,
DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY,
DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT,
SE, SN, TD, TG, TR. (German). CODEN: PIXXD2. APPLICATION: WO
2002-EP8393 20020726. PRIORITY: DE 2001-10137162 20010730.

AB The invention relates to a transdermal therapeutic system contg. an
active ingredient comprising a reservoir for administering
pramipexole, ropinirole and pharmaceutically safe salts or deriv.
thereof. Thus a drug soln. was prepd. that contained (g):
pramipexole 4.5; ethanol abs. 15.3; propylene glycol 4.59; Klucel HF
0.25. 2 ML of the soln. was filled into the pocket of a laminated
foil; the opening was sealed by welding. The laminated foil was
composed of a microporous polyethylene membrane with Durotak 87-4098
adhesive layer, a cover layer and an aluminum coated polyester foil
that contained a polyolefin layer for hot welding.

IT 9002-88-4, Polyethylene
(transdermal therapeutic system (reservoir-TTS) for using
pramipexole and ropinirole)

RN 9002-88-4 HCAPLUS

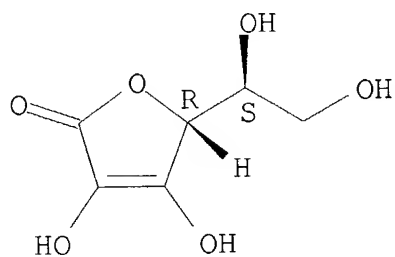
CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

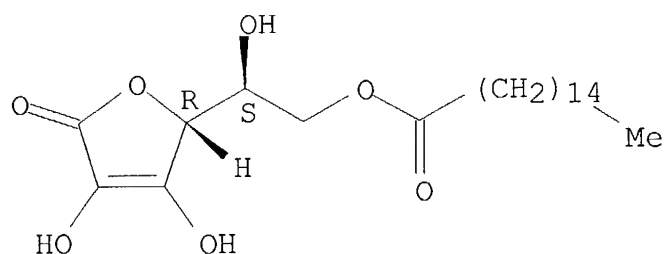
CRN 74-85-1

$$\text{H}_2\text{C}=\text{CH}_2$$

Absolute stereochemistry.



Absolute stereochemistry.



IC ICM A61K031-428
ICS A61K031-4015; A61K009-70
CC 63-6 (Pharmaceuticals)
IT Adhesives
Antioxidants
Antiparkinsonian agents
Emulsifying agents
Lamination

Permeation enhancers

Preservatives

Solubilizers

Stabilizing agents

Thickening agents

Welding of plastics

(transdermal therapeutic system (reservoir-TTS) for using
pramipexole and ropinirole)

IT 9002-88-4, Polyethylene 25067-02-1, Duro-Tak 87-4098
91374-21-9, Ropinirole 104632-25-9, Pramipexole dihydrochloride
104632-26-0, Pramipexole

(transdermal therapeutic system (reservoir-TTS) for using
pramipexole and ropinirole)

IT 50-81-7, L-Ascorbic acid, biological studies 57-55-6,
Propylene glycol, biological studies 64-17-5, Ethanol, biological
studies 110-27-0, Isopropylmyristate 128-37-0, biological
studies 137-66-6, Ascorbylpalmitate 139-33-3 994-36-5,
Sodium citrate 1406-18-4, Vitamin E 7778-49-6, Potassium citrate
25013-16-5, Butylhydroxyanisole 91374-21-9D, Ropinirole, salts and
derivs. 104632-26-0D, Pramipexole, salts and derivs.

(transdermal therapeutic system (reservoir-TTS) for using
pramipexole and ropinirole)

L65 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

2002:902214 Document No. 138:1668 Purification and characterization of
an autoclavable superoxide dismutase (SOD) isozyme from *Potentilla*
atrosanguinea, and use of the SOD in cosmetic, food and
pharmaceutical compositions. Kumar, Sanjay; Sahoo, Rashmita; Ahuja,
Paramvir Singh (Council of Scientific & Industrial Research (CSIR),
India). U.S. US 6485950 B1 20021126, 30 pp. (English). CODEN:
USXXAM. APPLICATION: US 2000-617118 20000714.

AB The invention relates to a novel purified isoenzyme of an
autoclavable superoxide dismutase extd. from the plant *Potentilla*
atrosanguinea Lodd. variety *argyrophylla*. The superoxide dismutase
has the following characteristics: O₂-scavenging activity remains
same before and after autoclaving; scavenges O₂- from sub-zero temp.
of -20.degree. C. to high temp. of +80.degree.; O₂- scavenging
activity at 25.degree. for 30 days without adding any
stabilizing agent such as polyols or sugars; O₂- scavenging
activity in the presence of saline (0.9% sodium chloride) to 61.8%
of the control (without 0.9% sodium chloride), **stable** at
4.degree. for at least 8 mo; contamination free and infection free
from any living micro- and/or macro-organism after autoclaving. The
enzyme possesses temp. optima at 0.degree.; possesses a mol. wt. of
33 kD under non-denaturing conditions; possesses a mol. wt. of 36
kD under denaturing conditions; has clear peaks in UV range at 268
and 275 nm; has an enzyme turnover no. of 19.53.times.104% per nmol
per min at 0.degree.; and requires Cu/Zn as a co-factor. The

invention also relates to a process for the extn. of the superoxide dismutase and its use in prepg. cosmetic, pharmaceutical and food compns. The method for the prepn. of the purified isoenzyme of autoclavable superoxide dismutase and formulations contg. the said autoclavable superoxide dismutase are disclosed.

IT 50-81-7, Vitamin C, biological studies 77-09-8,

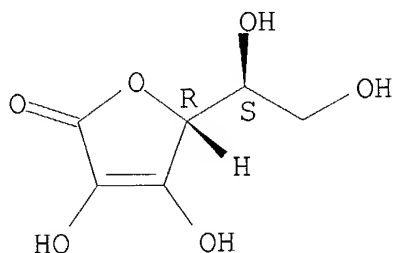
Phenolphthalein

(compns. contg.; purifn. and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compns.)

RN 50-81-7 HCAPLUS

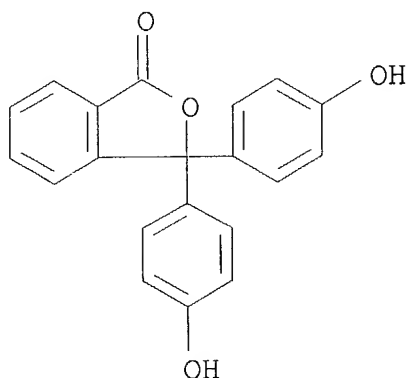
CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 77-09-8 HCAPLUS

CN 1(3H)-Isobenzofuranone, 3,3-bis(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



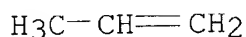
IT 9003-07-0, Polypropylene

(compns. contg.; purifn. and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and

pharmaceutical compns.)
RN 9003-07-0 HCAPLUS
CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1
CMF C3 H6



IC ICM C12N009-02
ICS C12N009-00; A61K038-44
NCL 435189000; 435183000; 424094400
CC 7-2 (Enzymes)
Section cross-reference(s): 17, 62, 63
IT Amphiphiles
Analgesics
Anti-inflammatory agents
Antibacterial agents
Antibiotics
Antimicrobial agents
Antioxidants
Beeswax
Carriers
Coloring materials
Emulsifying agents
Feed additives
Flavoring materials
Hemostatics
Perfumes
Preservatives
Radical scavengers
Surfactants
Vaccines
(compns. contg.; purifn. and characterization of autoclavable
superoxide dismutase (SOD) isoenzyme from *Potentilla*
atrosanguinea, and use of SOD in cosmetic, food and
pharmaceutical compns.)
IT Aerosols
Buffers
Cosmetics
Dental materials and appliances
Dentifrices
Deodorants
Dialysis

Drug delivery systems

Drugs

Food additives

Gums and Mucilages

HPLC

Hair preparations

Homogenization

Ion exchange chromatography

Leaf

Potentilla

Potentilla argyrophylla atrosanguinea

Precipitation (chemical)

Shampoos

Solutions

Sprays

Stability

Sunscreens

Tablets

Thermal stability

(purifn. and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compns.)

- IT 50-70-4D, Sorbitol, esters 50-81-7, Vitamin C, biological studies 52-90-4, L-Cysteine, biological studies 57-10-3, Palmitic acid, biological studies 57-10-3D, Palmitic acid, glycerides 57-11-4, Stearic acid, biological studies 57-41-0, Phenytoin 57-50-1, Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 58-08-2, Caffeine, biological studies 58-95-7, Tocopherol acetate 59-02-9, .alpha.-Tocopherol 60-33-3, Linoleic acid, biological studies 60-33-3D, Linoleic acid, glycerides 62-53-3, Aniline, biological studies 63-42-3, Lactose 63-68-3, L-Methionine, biological studies 64-17-5, Ethanol, biological studies 67-56-1, Methanol, biological studies 67-63-0, Isopropanol, biological studies 69-93-2, Uric acid, biological studies 70-18-8, Reduced glutathione, biological studies 71-23-8, Propanol, biological studies 71-36-3, Butanol, biological studies 74-79-3, L-Arginine, biological studies 77-09-8, Phenolphthalein 87-99-0, Xylitol 90-05-1, Guaiacol 106-69-4, 1,2,6-Hexanetriol 107-21-1, Ethylene glycol, biological studies 107-35-7, Taurine 108-95-2, Phenol, biological studies 110-27-0, Isopropyl myristate 110-36-1, Butyl myristate 112-53-8, Lauryl alcohol 112-72-1, Myristyl alcohol 112-80-1, Oleic acid, biological studies 112-80-1D, Oleic acid, glycerides 112-85-6, Behenic acid 112-86-7, Erucic acid 112-92-5, Stearyl alcohol 122-99-6, Phenoxyethanol 124-07-2D, Caprylic acid, glycerides 124-07-2D, Octanoic acid, hydroxylated polyisobutenyl derivs. 127-17-3, biological studies 127-82-2, Zinc phenol sulfonate 128-44-9, Sodium saccharinate 141-22-0,

Ricinoleic acid 142-91-6, Isopropyl palmitate 143-07-7, Lauric acid, biological studies 143-07-7D, Lauric acid, glycerides 143-28-2, Oleyl alcohol 302-04-5, Thiocyanate, biological studies 334-48-5D, Capric acid, glycerides 364-98-7, Diazoxide 404-86-4, Capsaicin 463-40-1, Linolenic acid 463-40-1D, Linolenic acid, glycerides 506-30-9, Arachidic acid 526-84-1, Dihydroxymaleic acid 527-60-6, Mesitol 538-23-8, Octanoic acid triglyceride 540-11-4, Ricinoleyl alcohol 544-63-8, Myristic acid, biological studies 544-63-8D, Myristic acid, alkyl esters 544-63-8D, Myristic acid, glycerides 546-46-3, Zinc citrate 553-72-0, Zinc benzoate 557-34-6, Zinc acetate 585-86-4, Lactitol 616-91-1, N-Acetyl-L-cysteine 621-71-6 628-97-7, Ethyl palmitate 629-98-1, Erucyl alcohol 661-19-8, Behenyl alcohol 1300-26-1, Zinc glycerophosphate 1314-13-2, Zinc oxide, biological studies 1314-22-3, Zinc peroxide 1330-70-7, Hydroxystearic acid 1332-07-6, Zinc borate 1406-18-4, Vitamin E 1464-42-2, Selenomethionine 2599-01-1, Cetyl myristate 2724-58-5, Isostearic acid 2814-60-0 3068-00-6, 1,2,4-Butanetriol 3460-37-5, Hexyl stearate 3486-35-9, Zinc carbonate 3614-08-2, Selenocysteine 4345-03-3 4468-02-4, Zinc gluconate 5333-42-6, 2-Octyl-dodecanol 7235-40-7, .beta.-Carotene 7631-86-9, Silica, biological studies 7646-85-7, Zinc chloride, biological studies 7681-49-4, Sodium fluoride, biological studies 7699-45-8, Zinc bromide 7733-02-0, Zinc sulfate 7779-88-6, Zinc nitrate 7782-49-2, Selenium, biological studies 9001-48-3, Glutathione reductase 9003-20-7, Polyvinyl acetate 9003-99-0, Peroxidase 9004-61-9, Hyaluronic acid 9005-00-9, Steareth-2 9005-63-4D, Polyoxyethylenesorbitan, fatty acid esters 9007-43-6, Cytochrome c, biological studies 9013-66-5, Glutathione peroxidase 10191-41-0, DL-.alpha.-Tocopherol 10401-55-5, Cetyl ricinoleate 11103-57-4, Vitamin A 11126-29-7, Zinc silicate 12441-09-7D, Sorbitan, fatty acid esters 12651-25-1, Zinc titanate 13463-41-7, Zinc pyrithione 13826-88-5, Zinc tetrafluoroborate 14281-83-5, Zinc glycinate 16283-36-6, Zinc salicylate 16871-71-9, Zinc hexafluorosilicate 16887-00-6, Chloride, biological studies 16984-48-8, Fluoride, biological studies 18312-31-7, Stearyl octanoate 20461-54-5, Iodide, biological studies 24959-67-9, Bromide, biological studies 25231-21-4, Polypropylene glycol stearyl ether 25265-75-2, Butylene glycol 25322-68-3, Polyethylene glycol 25322-69-4, Polypropylene glycol 25618-55-7D, Polyglycerin, fatty acid esters 26281-43-6, 3,5-Dichloro-2-hydroxybenzenesulfonic acid 27458-93-1, Isostearyl alcohol 32797-18-5, 1,3-Butadien-1-ol 36653-82-4, Hexadecyl alcohol 38304-91-5, Minoxidil 39467-17-9, Zinc stannate 51744-92-4, .alpha.-Tocopheryl linoleate 52225-20-4 52296-98-7, Octadecanediol 71276-50-1, .alpha.-Tocopherol phosphate 77752-14-8, Purcellin oil 476494-41-4

(compns. contg.; purifn. and characterization of autoclavable

superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compns.)

- IT 67-66-3, Chloroform, biological studies 9003-01-4, Polyacrylic acid 9003-07-0, Polypropylene 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropylcellulose 9004-65-3, Hydroxypropylmethylcellulose 9004-67-5, Methylcellulose 9005-25-8D, Starch, derivs
(compns. contg.; purifn. and characterization of autoclavable superoxide dismutase (SOD) isoenzyme from *Potentilla atrosanguinea*, and use of SOD in cosmetic, food and pharmaceutical compns.)

L65 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
2002:539496 Document No. 137:114228 Cosmetic and/or dermatological acid composition containing an amphiphilic polymer. Lorant, Raluca; Lennon, Paula (L'Oreal, Fr.). PCT Int. Appl. WO 2002055039 A1 20020718, 47 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (French). CODEN: PIXXD2. APPLICATION: WO 2002-FR47 20020108. PRIORITY: FR 2001-336 20010111.

- AB The invention relates to a cosmetic and/or dermatol. compn. contg. an acid aq. medium and at least one amphiphilic polymer comprising at least one monomer having ethylenic unsatn. with a sulfonic group, in free form or partially or totally neutralized, and comprising at least one hydrophobic part. The invention also relates to a use for said compn. involving the cosmetic treatment of and/or application of make-up to keratinous matter, in particular the skin, hair and mucous membranes of the skin. The invention also relates to the use of an amphiphilic polymer comprising at least one monomer having ethylenic unsatn. with a sulfonic group, in free form or partially or totally neutralized, and comprising at least one hydrophobic part, in order to **stabilize** a cosmetic or dermatol. compn. contg. at least one acid active ingredient and/or having a pH less than or equal to 5. A polymer was obtained by polymn. of Genapol T-250 methacrylate 10, 2-acrylamido-2-methylpropane sulfonic acid neutralized by ammonia 90, trimethylol propane triacrylate 1.8, dilauryl peroxide 1, and tert-butanol 300 g. An cosmetic cream contained above polymer 2, mineral oil 5, cyclohexasiloxane 5, a mixt. of fruit acids 1, triethanolamine q.s. pH = 3.5, **preservatives**, and water q.s. 100 g.

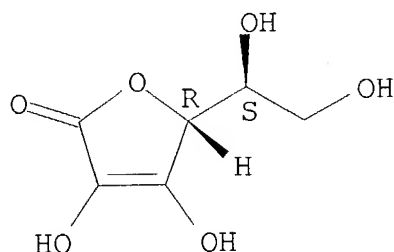
- IT 50-81-7, Ascorbic acid, biological studies

(cosmetic and/or dermatol. acid compn. contg. amphiphilic polymer)

RN 50-81-7 HCAPLUS

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-06

ICS A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 38

IT Antibacterial agents

Antioxidants

Dyes

Emulsifying agents

Gelation agents

Hair preparations

Insecticides

Perfumes

Pigments, nonbiological

Preservatives

Sequestering agents

Sunscreens

Surfactants

Thickening agents

(cosmetic and/or dermatol. acid compn. contg. amphiphilic polymer)

IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 65-85-0, Benzoic acid, biological studies 69-72-7, Salicylic acid, biological studies 69-72-7D, Salicylic acid, derivs. 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 80-69-3, Tartronic acid 90-64-2, Mandelic acid 110-17-8, Fumaric acid, biological studies 127-17-3, Pyruvic acid, biological studies 295-01-2, Cyclohexasiloxane 302-79-4, Retinoic acid 302-79-4D, Retinoic acid, derivs. 331-39-5 464-92-6, Asiatic acid 501-30-4, Kojic acid 526-83-0, Tartaric acid 526-95-4, Gluconic acid 544-57-0, 2-Hydroxytetracosanoic acid 547-64-8, Methylactate 600-15-7,

2-Hydroxybutanoic acid 617-31-2, 2-Hydroxypentanoic acid 617-73-2, 2-Hydroxyoctanoic acid 629-22-1, 2-Hydroxyoctadecanoic acid 636-69-1, 2-Hydroxyheptanoic acid 685-73-4, Galacturonic acid 764-67-0, 2-Hydroxyhexadecanoic acid 828-01-3 1449-05-4, .beta.-Glycyrrhetic acid 2507-55-3, 2-Hydroxytetradecanoic acid 2984-55-6, 2-Hydroxydodecanoic acid 4741-30-4D, Carbonodithioic acid, O-esters 5393-81-7, 2-Hydroxydecanoic acid 6064-63-7, 2-Hydroxyhexanoic acid 6556-12-3, Glucuronic acid 6915-15-7, Malic acid 6949-98-0, Aleuritic acid 15896-36-3, 2-Hydroxynonanoic acid 16742-48-6, 2-Hydroxyeicosanoic acid 17812-24-7, Ribonic acid 19790-86-4, 2-Hydroxyundecanoic acid 27503-81-7, 2-Phenylbenzimidazole 5-sulfonic acid 56039-58-8 92761-26-7

(cosmetic and/or dermatol. acid compn. contg. amphiphilic polymer)

L65 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

2000:663438 Document No. 133:256558 Water-containing preparation for pencil-type cosmetics. (Schwan-Stabilo Cosmetics GmbH & Co., Germany). Ger. Gebrauchsmusterschrift DE 20009445 U1 20000921, 23 pp. (German). CODEN: GGXXFR. APPLICATION: DE 2000-20009445 20000525.

AB A cosmetic prepn. is characterized by: (a) a fat phase contg. at least one oil component, at least one wax component, at least one paraffin component, and optionally other fat-compatible substances; (b) an aq. phase contg. 1-25% water and optionally other water-compatible substances; (c) at least one biopolymer; (d) at least one w/o emulsifying agent or a mixt. of w/o emulsifying agents; (e) at least one further active substance suitable for use in pencil-like cosmetics; and (f) supplementary surface-active substances as co-emulsifying agents, in addn. to other normal constituents such as **stabilizers** and other additives. Thus, a compn. for a lip- or eye-contouring pencil may contain polyethylene 2, polybutene 10, ceresin 12, paraffin 5, candelilla wax 4, microcryst. wax 5, Buxus chinensis 15, caprylic capric triglyceride 8, hydrogenated coconut oil 10, and PEG-30 dipolyhydroxystearate 4.5%, plus other minor constituents and water.

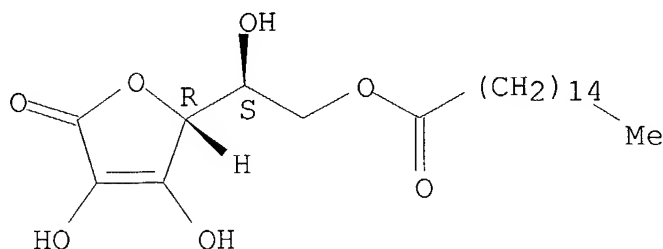
IT 137-66-6, Ascorbyl palmitate 9002-88-4

(water-contg. prepn. for pencil-type cosmetics)

RN 137-66-6 HCAPLUS

CN L-Ascorbic acid, 6-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9002-88-4 HCAPLUS
 CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1
 CMF C2 H4

$\text{H}_2\text{C}=\text{CH}_2$

IC ICM A61K007-00
 ICS A61K007-027; A61K007-031; A61K007-032; A61K007-40
 CC 62-4 (Essential Oils and Cosmetics)
 IT Acne

Antioxidants

Beeswax
 Cosmetics
 Emulsifying agents
 Jojoba (*Simmondsia chinensis*)
 Ozocerite
 Perfumes

Preservatives

Sunscreens

(water-contg. prepn. for pencil-type cosmetics)

IT 103-23-1, Di(ethylhexyl)adipate 110-27-0, Isopropyl myristate
 123-95-5, Butyl stearate 137-66-6, Ascorbyl palmitate
 142-91-6, Isopropyl palmitate 540-10-3, Cetyl palmitate
 3687-45-4, Oleyl oleate 3687-46-5, Decyl oleate 6938-94-9,
 Diisopropyl adipate 9002-18-0, Agar-agar 9002-88-4
 9003-29-6, Polybutene 9004-32-4, Carboxymethylcellulose
 9004-57-3, Ethyl cellulose 9004-62-0, Hydroxyethylcellulose
 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid
 9006-65-9, Dimethicone 9036-66-2, Galactoarabinan 9062-07-1,
 .iota.-Carrageenan 11114-20-8, .kappa.-Carrageenan 11138-66-2,
 Xanthan 22047-49-0, 2-Ethylhexyl stearate 31807-55-3,

Isododecane 34316-64-8, Hexyl laurate 34464-38-5, Isodecane
 34464-43-2, Isoundecane 41669-30-1, Isostearyl isostearate
 65381-09-1, Caprylic capric triglyceride 71010-52-1, Gellan gum
 81897-25-8, 2-Ethylhexyl isostearate 195868-36-1,
 Phenyltrimethicone
 (water-contg. prepn. for pencil-type cosmetics)

L65 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
 2000:259972 Document No. 132:293042 Encapsulation of sensitive liquid
 components into a matrix to obtain discrete shelf-stable
 particles. Van Lengerich, Bernhard H. (General Mills, Inc., USA).
 PCT Int. Appl. WO 2000021504 A1 20000420, 56 pp. DESIGNATED STATES:
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
 KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
 MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
 UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM;
 RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA,
 GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG.
 (English). CODEN: PIXXD2. APPLICATION: WO 1999-US20905 19991006.
 PRIORITY: US 1998-PV103700 19981009; US 1998-PV109696 19981124; US
 1999-233443 19990120.

AB A liq. encapsulant component which contains an active, sensitive
 encapsulant, such as a live microorganism or an enzyme dissolved or
 dispersed in a liq. plasticizer is admixed with a plasticizable
 matrix material. The matrix material is plasticizable by the liq.
 plasticizer and the encapsulation of the active encapsulant is
 accomplished at a low temp. and under low shear conditions. The
 active component is encapsulated and/or embedded in the
 plasticizable matrix component or material in a continuous process
 to produce discrete, solid particles. The liq. content of the liq.
 encapsulant component provides substantially all or completely all
 of the liq. plasticizer needed to plasticize the matrix component to
 obtain a formable, extrudable, cuttable, mixt. or dough. Removal of
 liq. plasticizer prior to extrusion is not needed to adjust the
 viscosity of the mixt. for formability. Release of an active
 component from the matrix may be delayed or controlled over time so
 that the active component is delivered when and where it is needed
 to perform its intended function. Controlled release, discrete,
 solid particles which contain an encapsulated and/or embedded
 component such as a heat sensitive or readily oxidizable
 pharmaceutically, biol., or nutritionally active component are
 continuously produced without substantial destruction of the matrix
 material or encapsulant.

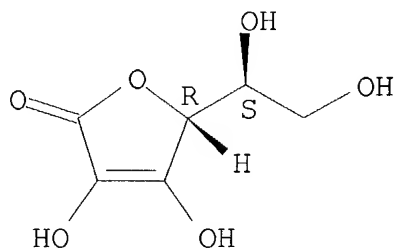
IT 50-81-7, L-Ascorbic acid, biological studies 71-63-6
 , Digitoxin 77-09-8 128-62-1, Noscapine
 5355-48-6 9002-86-2, Polyvinyl chloride
 20830-75-5, Digoxin 30685-43-9, Metildigoxin

(encapsulation of sensitive liq. components into matrix to obtain discrete shelf-~~stable~~ particles)

RN 50-81-7 HCAPLUS

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

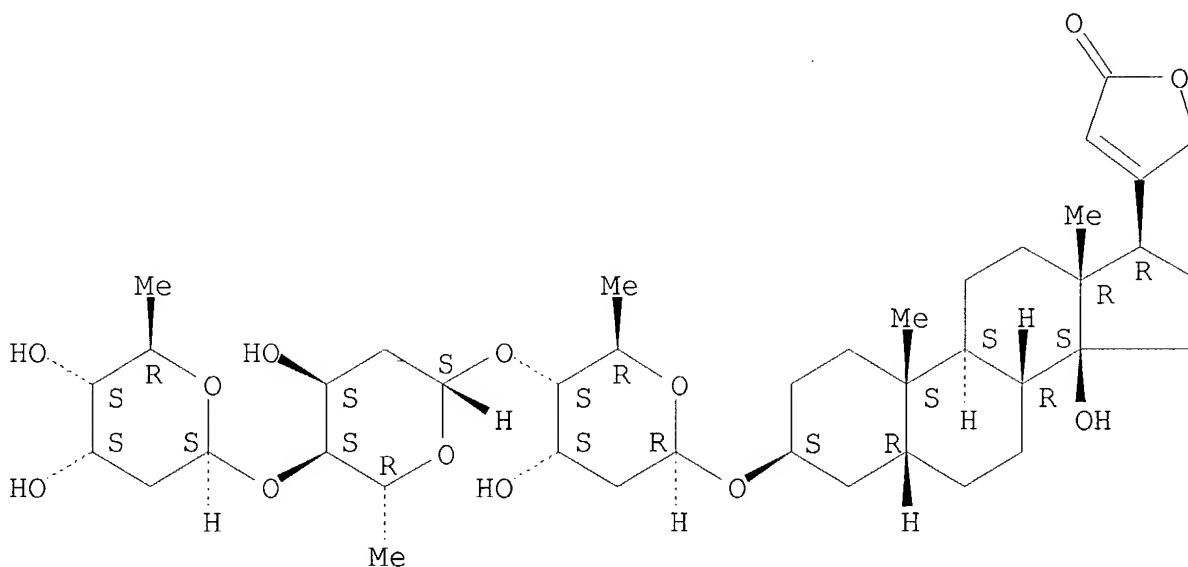
Absolute stereochemistry.



RN 71-63-6 HCAPLUS

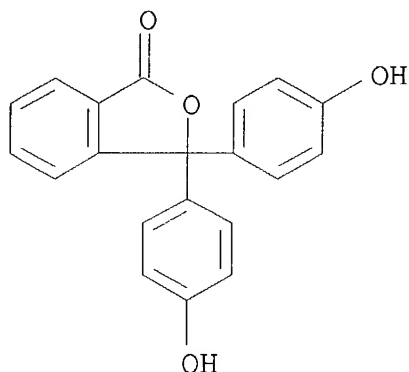
CN Card-20(22)-enolide, 3-[(O-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl-(1.fwdarw.4)-O-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl-(1.fwdarw.4)-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl)oxy]-14-hydroxy-, (3.beta.,5.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 77-09-8 HCAPLUS

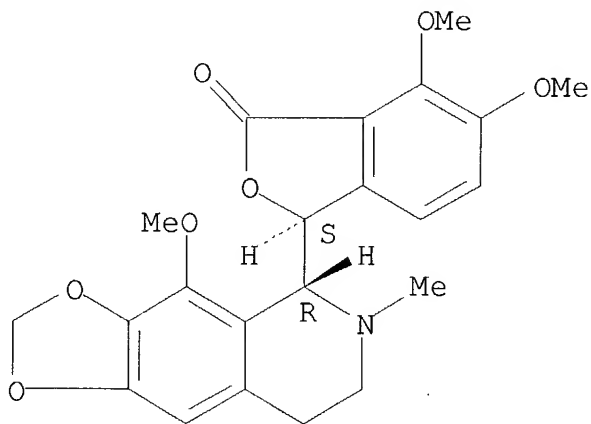
CN 1(3H)-Isobenzofuranone, 3,3-bis(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 128-62-1 HCAPLUS

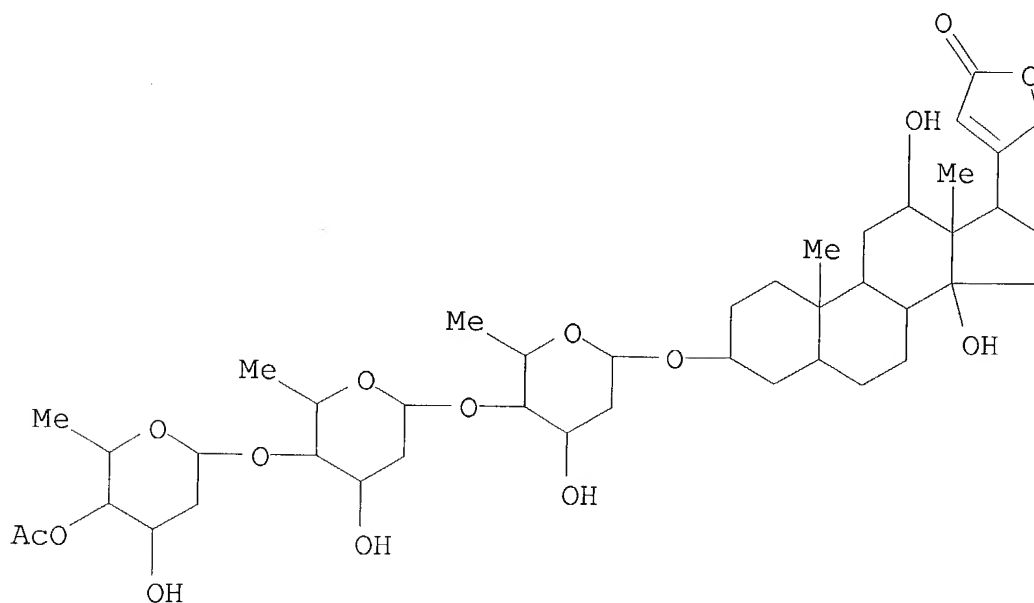
CN 1(3H)-Isobenzofuranone, 6,7-dimethoxy-3-[(5R)-5,6,7,8-tetrahydro-4-methoxy-6-methyl-1,3-dioxolo[4,5-g]isoquinolin-5-yl]-, (3S)-(9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

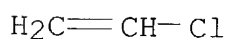


RN 5355-48-6 HCAPLUS

CN Card-20(22)-enolide, 3-[(O-4-O-acetyl-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl-(1.fwdarw.4)-O-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl-(1.fwdarw.4)-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl)oxy]-12,14-dihydroxy-, (3.beta.,5.beta.,12.beta.)-(9CI) (CA INDEX NAME)

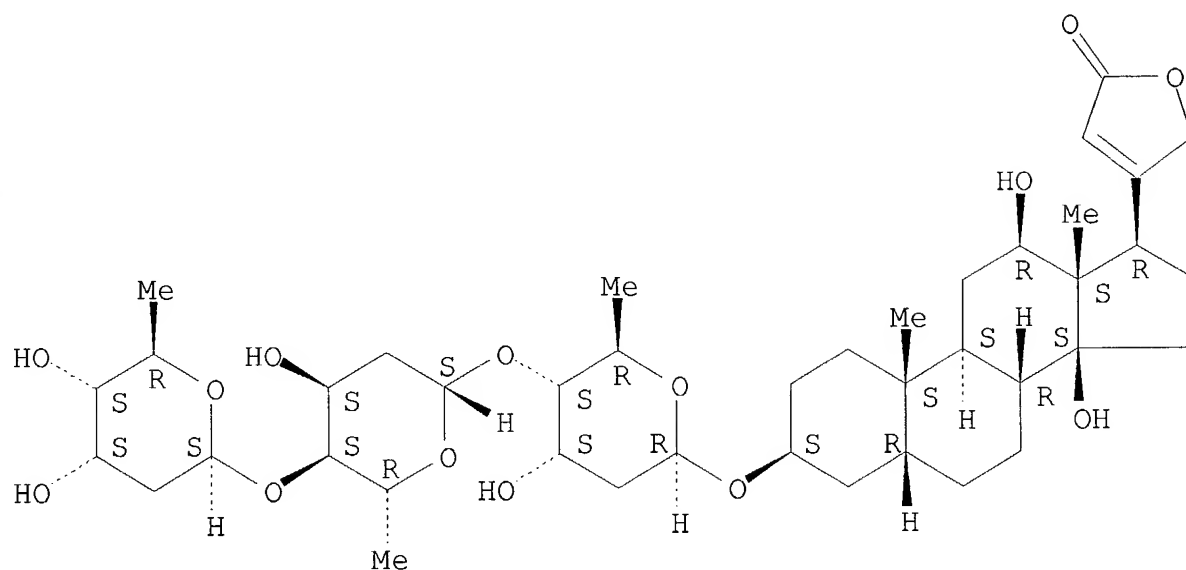


RN 9002-86-2 HCAPLUS
 CN Ethene, chloro-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 75-01-4
 CMF C2 H3 C1



RN 20830-75-5 HCAPLUS
 CN Card-20(22)-enolide, 3-[(0-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl-(1.fwdarw.4)-O-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl-(1.fwdarw.4)-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl)oxy]-12,14-dihydroxy-, (3.beta.,5.beta.,12.beta.)- (9CI) (CA INDEX NAME)

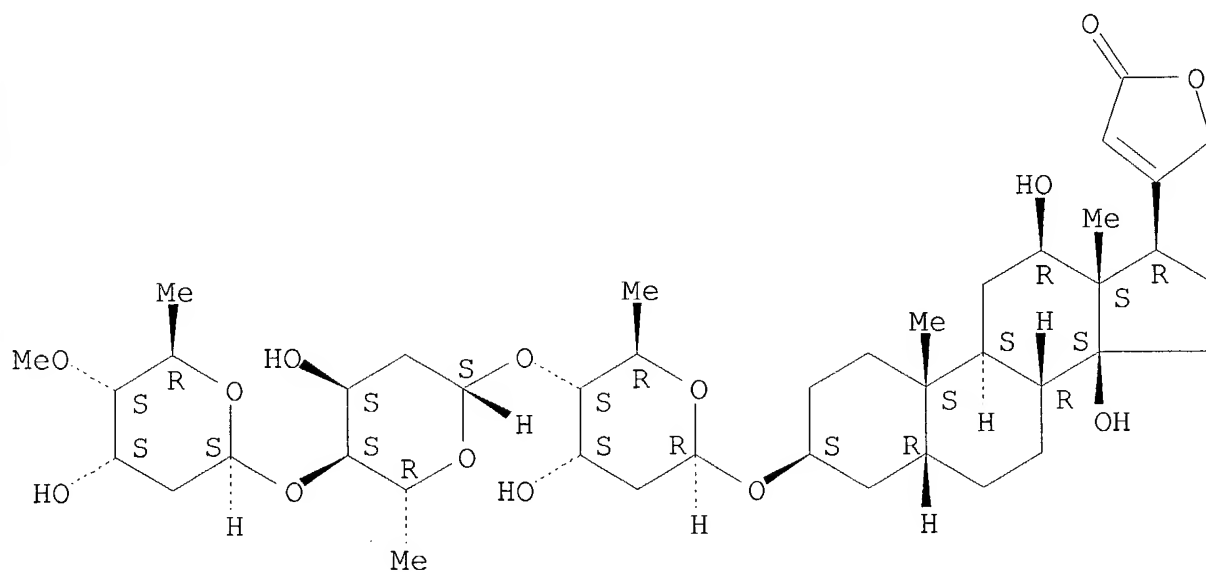
Absolute stereochemistry.



RN 30685-43-9 HCAPLUS

CN Card-20(22)-enolide, 3-[(O-2,6-dideoxy-4-O-methyl-.beta.-D-ribo-hexopyranosyl-(1.fwdarw.4)-O-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl-(1.fwdarw.4)-2,6-dideoxy-.beta.-D-ribo-hexopyranosyl)oxy]-12,14-dihydroxy-, (3.beta.,5.beta.,12.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K009-10

CC 17-13 (Food and Feed Chemistry)
Section cross-reference(s): 63

ST encapsulation food liq component matrix **preservation**

IT Polymers, biological studies
(amphiphilic; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Nitro compounds
Nitro compounds
Nitroso compounds
(arom.; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Antitoxins
(botulism; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Bakery products
(cakes; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Natural products, pharmaceutical
(cascara sagrada; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Temperature effects, biological
(cold; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Bakery products
(cookies; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Bakery products
(crackers; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Puddings
(custard; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Natural products, pharmaceutical
(digitalis; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Toxins
(diphtheria, antitoxins; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Antibiotics
Antioxidants
Antitumor agents
Antivenoms
Antiviral agents
Beverages
Cholera
Detergents
Dough

Drug delivery systems
Durum wheat
Emulsifying agents
Encapsulation
Flavor
Flavoring materials
Food additives
Food functional properties
Food **preservation**
Food viscoelasticity
Food viscosity
Health food
Hepatitis virus
Human poliovirus
Hydrocolloids
Ice cream
Lactobacillus acidophilus
Microorganism
Pertussis
Pigments, biological
Plasticizers
Puddings
Rauvolfia serpentina
Soups
Surfactants
Thyroid gland
Vaccines
Virus
Wheat flour

(encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Edible oils

(encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)

IT Amino acids, biological studies

Castor oil

Cod liver oil

Dipeptides

Enzymes, biological studies

Estrogens

Fats and Glyceridic oils, biological studies

Glucocorticoids

Glutens

Hormones, plant

Lanolin

Mineral elements, biological studies

Paraffin waxes, biological studies

Pentosans

- Peptides, biological studies
- Phospholipids, biological studies
- Polyolefins
- Polyurethanes, biological studies
- Pumice
- Steroids, biological studies
- Tetracyclines
- Trace elements, biological studies
- Tuberculin
- Vitamins
 - (encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Fatty acids, biological studies
 - (essential; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Belladonna (Atropa belladonna)
 - Chrysanthemum
 - (ext.; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Microorganism
 - (food; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Temperature effects, biological
 - (heat; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Food
 - (infant; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Natural products, pharmaceutical
 - (ipecac; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Carbohydrates, biological studies
 - (low-mol. wt.; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Nutrients
 - (micronutrients; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Antibodies
 - (monoclonal; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Aromatic compounds
 - Aromatic compounds
 - (nitro; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Peptides, biological studies
 - (oligopeptides; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Natural products, pharmaceutical

- (opium; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Mucopolysaccharides, biological studies
(polysulfate; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Breakfast cereal
(ready-to-eat; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Food
(salads; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Durum wheat
(semolina; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Food
(snack; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Food
(sports bars; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Tannins
(sulfated; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Carboxylic acids, biological studies
(thiocarboxylic; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Fatty acids, biological studies
(unsatd.; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Measles virus
Rabies
Rubella virus
(vaccine; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Fever and Hyperthermia
(yellow, vaccine; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT Milk preparations
(yogurt; encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT 9005-25-8D, Starch, hydrolyzates
(encapsulation of sensitive liq. components into matrix to obtain discrete shelf-**stable** particles)
- IT 50-02-2, Dexamethasone 50-04-4, Cortisone acetate 50-06-6,
Phenobarbital, biological studies 50-09-9 50-12-4, Mephenytoin
50-14-6, Ergocalciferol 50-18-0, Cyclophosphamide 50-23-7,
Hydrocortisone 50-24-8, Prednisolone 50-27-1, Estriol 50-28-2,
Estradiol, biological studies 50-33-9, Phenylbutazone, biological

studies 50-36-2, Cocaine 50-41-9, Clomiphene citrate 50-44-2, Mercaptopurine 50-47-5, Desipramine 50-48-6, Amitriptylin 50-49-7 50-52-2, Thioridazine 50-53-3, Chlorpromazine, biological studies 50-54-4, Quinidine sulfate 50-55-5, Reserpine 50-58-8, Phendimetrazine tartrate 50-63-5, Chloroquine phosphate 50-78-2, Aspirin 50-81-7, L-Ascorbic acid, biological studies 50-96-4, Isoetharine hydrochloride 51-05-8, Procaine hydrochloride 51-15-0, Pralidoxime chloride 51-21-8, Fluorouracil 51-30-9, Isoproterenol hydrochloride 51-34-3, Scopolamine 51-43-4, Epinephrine 51-48-9, Levothyroxine, biological studies 51-52-5, Propyl thiouracil 51-55-8, Atropine, biological studies 51-57-0, Methamphetamine hydrochloride 51-64-9, Dextroamphetamine 51-74-1, Histamine phosphate 51-83-2, Carbachol 51-84-3, Acetylcholine, biological studies 51-98-9, Norethindrone acetate 52-01-7, Spironolactone 52-24-4, Thiotepa 52-49-3, Trihexyphenidyl hydrochloride 52-53-9, Verapamil 52-67-5, Penicillamine 52-68-6, Trichlorfon 52-86-8, Haloperidol 52-89-1, L-Cysteine hydrochloride 53-03-2, Prednisone 53-16-7, Estrone, biological studies 53-19-0, Mitotane 53-39-4, Oxandrolone 53-60-1, Promazine hydrochloride 53-86-1, Indomethacin 54-21-7, Sodium salicylate 54-31-9, Furosemide 54-36-4, Metyrapone 54-47-7, Pyridoxal phosphate 54-64-8, Thimerosal 54-85-3, Isoniazid 55-03-8, Levothyroxine sodium 55-06-1, Liothyronine sodium 55-63-0, Nitroglycerin 55-98-1, Busulfan 56-47-3, Deoxycorticosterone acetate 56-53-1, Diethylstilbestrol 56-54-2 56-75-7, Chloramphenicol 56-84-8, L-Aspartic acid, biological studies 56-86-0, L-Glutamic acid, biological studies 56-87-1, L-Lysine, biological studies 57-13-6, Urea, biological studies 57-22-7, Vincristine 57-33-0, Pentobarbital sodium 57-41-0, Phenytoin 57-42-1, Meperidine 57-43-2, Amobarbital 57-47-6, Physostigmine 57-53-4, Meproamate 57-63-6, Ethinyl estradiol 57-66-9, Probenecid 57-68-1, Sulfamethazine 57-83-0, Progesterone, biological studies 57-92-1, biological studies 57-96-5, Sulfinpyrazone 58-00-4, Apomorphine 58-08-2, Caffeine, biological studies 58-14-0, Pyrimethamine 58-18-4, Methyltestosterone 58-22-0, Testosterone 58-25-3, Chlordiazepoxide 58-27-5, Menadione 58-32-2, Dipyridamole 58-33-3, Promethazine hydrochloride 58-38-8, Prochlorperazine 58-39-9, Perphenazine 58-40-2, Promazine 58-54-8, Ethacrynic acid 58-55-9, Theophylline, biological studies 58-56-0, Pyridoxine hydrochloride 58-61-7D, Adenosine, derivs. 58-85-5 58-89-9, Lindane 58-93-5, Hydrochlorothiazide 58-94-6, Chlorothiazide 59-05-2, Methotrexate 59-30-3, Folic acid, biological studies 59-33-6, Pyrilamine maleate 59-43-8, Thiamin, biological studies 59-52-9, Dimercaprol 59-63-2, Isocarboxazid 59-66-5, Acetazolamide 59-67-6, Niacin, biological studies 59-92-7, Levodopa, biological studies 60-13-9, Amphetamine sulfate 60-18-4, L-Tyrosine, biological studies 60-56-0, Methimazole

60-80-0, Antipyrine 60-87-7, Promethazine 60-99-1,
Levomepromazine 61-00-7, Acepromazine 61-25-6, Papaverine
hydrochloride 61-68-7, Mefenamic acid 61-76-7, Phenylephrine
hydrochloride 61-90-5, L-Leucine, biological studies 62-31-7,
Dopamine hydrochloride 62-44-2, Phenacetin 62-67-9, Nalorphine
62-90-8, Nandrolone phenpropionate 63-68-3, Methionine, biological
studies 63-91-2, L-Phenylalanine, biological studies 63-92-3,
Phenoxybenzamine hydrochloride 63-98-9, Phenacemide 64-31-3,
Morphine sulfate 64-72-2, Chlortetracycline hydrochloride
64-77-7, Tolbutamide 64-86-8, Colchicine 65-45-2, Salicylamide
66-76-2, Dicoumarol 67-03-8, Thiamine hydrochloride 67-20-9,
Nitrofurantoin 67-45-8, Furazolidone 67-73-2, Fluocinolone
acetone 67-96-9, Dihydrotachysterol 67-97-0, Cholecalciferol
68-19-9, Cyanocobalamin 68-22-4, Norethindrone 68-35-9,
Sulfadiazine 68-41-7, Cycloserine 68-89-3, Metamizole 69-23-8,
Fluphenazine 69-44-3, Amodiaquine hydrochloride 69-53-4,
Ampicillin 69-72-7, Salicylic acid, biological studies 71-00-1,
L-Histidine, biological studies 71-58-9, Medroxyprogesterone
acetate 71-63-6, Digitoxin 71-68-1, Hydromorphone
hydrochloride 71-81-8, Isopropamide iodide 72-14-0,
Sulfathiazole 72-17-3 72-18-4, L-Valine, biological studies
72-19-5, L-Threonine, biological studies 72-33-3, Mestranol
72-63-9, Methandrostenolone 73-22-3, L-Tryptophan, biological
studies 73-48-3, Bendroflumethiazide 76-38-0, Methoxyflurane
76-42-6, Oxycodone 76-43-7, Fluoxymesterone 76-57-3, Codeine
77-09-8 77-19-0, Dicyclomine 77-21-4, Glutethimide
77-26-9, Butalbital 77-27-0, Thiamylal 77-36-1, Chlorthalidone
77-41-8, Methsuximide 78-11-5, Pentaerythritol tetranitrate
78-44-4, Carisoprodol 79-57-2, Oxytetracycline 80-08-0
80-13-7, Halazone 80-53-5, Terpin 81-07-2, Saccharin 81-13-0,
Dexpanthenol 81-23-2, Dehydrocholic acid 81-81-2, Warfarin
83-43-2 83-73-8, Iodoquinol 83-88-5, Riboflavin, biological
studies 84-02-6, Prochlorperazine maleate 84-17-3, Dienestrol
84-80-0, Phytonadione 85-79-0, Dibucaine 86-35-1, Ethotoin
87-00-3, Homatropine 87-08-1, Penicillin V 87-33-2, Isosorbide
dinitrate 88-04-0, Chloroxylenol 89-57-6, 5-Aminosalicylic acid
90-33-5 90-34-6, Primaquine 91-33-8, Benzthiazide 91-81-6,
Tripelennamine 92-13-7, Pilocarpine 93-14-1, Guaifenesin
94-09-7, Benzocaine 94-20-2, Chlorpropamide 94-24-6, Tetracaine
95-25-0, Chlorzoxazone 97-53-0, Eugenol 97-77-8, Disulfiram
98-96-4, Pyrazinamide 99-66-1, Valproic acid 100-97-0,
biological studies 101-26-8, Pyridostigmine bromide 101-31-5,
Hyoscyamine 102-76-1, Triacetin 103-16-2, Monobenzene
103-86-6, Hydroxyamphetamine 103-90-2 104-28-9, Cinoxate
104-31-4, Benzonatate 106-48-9 107-43-7, Betaine 108-46-3,
1,3-Benzenediol, biological studies 110-85-0, Piperazine,
biological studies 110-94-1, Pentanedioic acid 113-18-8,
Ethchlorvynol 113-52-0, Imipramine hydrochloride 113-59-7,

Chlorprothixene 113-92-8, Chlorpheniramine maleate 114-07-8,
 Erythromycin 114-80-7, Neostigmine bromide 115-38-8,
 Mephobarbital 120-97-8, Dichlorphenamide 121-25-5, Amprolium
 121-54-0, Benzethonium chloride

(encapsulation of sensitive liq. components into matrix to obtain
 discrete shelf-stable particles)

IT 121-75-5, Malathion 123-31-9, Hydroquinone, biological studies
 124-90-3, Oxycodone hydrochloride 124-94-7, Triamcinolone
 125-28-0, Dihydrocodeine 125-33-7, Primidone 125-71-3,
 Dextromethorphan 125-72-4, Levorphanol tartrate 126-07-8,
 Griseofulvin 127-07-1, Hydroxyurea 127-33-3, Demeclocycline
 127-48-0, Trimethadione 127-69-5, Sulfisoxazole 127-79-7
 128-44-9, Saccharin sodium 128-46-1, Dihydrostreptomycin
 128-49-4, Docusate calcium 128-62-1, Noscapine 129-20-4,
 Oxyphenbutazone 129-49-7, Methysergide maleate 129-51-1,
 Ergonovine maleate 130-26-7, Clioquinol 130-61-0, Thioridazine
 hydrochloride 131-13-5 131-57-7, Oxybenzone 132-17-2,
 Benztropine mesylate 132-92-3, Methicillin sodium 133-58-4,
 Nitromersol 133-67-5, Trichlormethiazide 134-03-2, Sodium
 ascorbate 134-80-5, Diethylpropion hydrochloride 135-07-9,
 Methyclothiazide 135-09-1, Hydroflumethiazide 136-40-3,
 Phenazopyridine hydrochloride 136-77-6, Hexyl resorcinol
 137-58-6, Lidocaine 141-01-5, Ferrous fumarate 143-71-5,
 Hydrocodone bitartrate 143-81-7, Butabarbital sodium 144-14-9,
 Anileridine 144-55-8, Sodium bicarbonate, biological studies
 144-80-9, Sulfacetamide 144-82-1, Sulfamethizole 144-83-2,
 Sulfapyridine 146-22-5, Nitrazepam 146-54-3, Triflupromazine
 147-52-4, Nafcillin 147-85-3, L-Proline, biological studies
 148-79-8 148-82-3, Melphalan 151-67-7, Halothane 152-62-5,
 Dydrogesterone 154-41-6, Phenylpropanolamine hydrochloride
 154-42-7, Thioguanine 156-51-4, Phenelzine sulfate 297-76-7,
 Ethynodiol diacetate 298-46-4, Carbamazepine 298-50-0,
 Propantheline 298-57-7, Cinnarizine 298-59-9, Methylphenidate
 hydrochloride 298-81-7, Methoxsalen 299-27-4, Potassium
 gluconate 299-29-6, Ferrous gluconate 299-42-3, Ephedrine
 302-22-7, Chlormadinone acetate 302-79-4, Tretinoin 303-25-3,
 Cyclizine hydrochloride 304-20-1, Hydralazine hydrochloride
 304-59-6, Potassium sodium tartrate, biological studies 305-03-3,
 Chlorambucil 309-43-3, Secobarbital sodium 315-30-0, Allopurinol
 317-34-0, Aminophylline 318-98-9 329-65-7, Racepinefrine
 343-55-5, Dicloxacillin sodium 345-78-8, Pseudoephedrine
 hydrochloride 346-18-9, Polythiazide 356-12-7, Fluocinonide
 357-07-3, Oxymorphone hydrochloride 359-83-1D, Pentazocine, salts
 360-70-3, Nandrolone decanoate 364-62-5, Metoclopramide
 364-98-7, Diazoxide 366-70-1, Procarbazine hydrochloride
 378-44-9, Betamethasone 379-79-3, Ergotamine tartrate 382-67-2,
 Desoximetasone 388-51-2 389-08-2, Nalidixic acid 390-64-7,
 Prenylamine 396-01-0, Triamterene 426-13-1, Fluorometholone

434-07-1, Oxymetholone 435-97-2, Phenprocoumon 437-74-1,
Xantinol nicotinate 439-14-5, Diazepam 440-17-5, Trifluoperazine
hydrochloride 443-48-1, Metronidazole 446-86-6, Azathioprine
465-65-6, Naloxone 466-99-9, Hydromorphone 471-34-1, Calcium
carbonate, biological studies 474-86-2, Equilin 479-18-5,
Dyphylline 484-23-1, Dihydralazine 486-12-4, Triprolidine
511-12-6, Dihydroergotamine 514-36-3, Fludrocortisone acetate
514-65-8, Biperiden 518-47-8, Fluorescein sodium 520-85-4,
Medroxyprogesterone 523-87-5, Dimenhydrinate 525-66-6
527-07-1, Sodium gluconate 532-03-6, Methocarbamol 533-45-9,
Clomethiazole 536-21-0, Norfenefrine 536-33-4, Ethionamide
541-15-1, Levocarnitine 546-88-3, Acetohydroxamic acid 546-93-0,
Magnesium carbonate 548-62-9, Gentian violet 548-73-2,
Droperidol 549-18-8, Amitriptyline hydrochloride 550-83-4,
Propoxycaïne hydrochloride 551-27-9, Propicillin 552-94-3,
Salsalate 554-13-2, Lithium carbonate 554-57-4, Methazolamide
554-92-7, Trimethobenzamide hydrochloride 555-30-6, Methyldopa
557-34-6, Zinc acetate 562-10-7 564-25-0 577-11-7, Docusate
sodium 579-56-6, Isoxsuprine hydrochloride 587-61-1,
Propyliodone 590-63-6, Bethanechol chloride 595-33-5, Megestrol
acetate 596-51-0, Glycopyrrolate 599-79-1, Sulfasalazine
599-88-2, Sulfaperin 603-50-9, Bisacodyl 604-75-1, Oxazepam
614-39-1, Procainamide hydrochloride 616-91-1, Acetylcysteine
620-61-1, Hyoscyamine sulfate 630-56-8, Hydroxyprogesterone
caproate 637-07-0, Clofibrate 637-58-1, Pramoxine hydrochloride
642-78-4, Cloxacillin sodium 651-06-9, Sulfamethoxydiazine
672-87-7, Metyrosine 709-55-7, Etilefrine 721-50-6, Prilocaine
723-46-6, Sulfamethoxazole 738-70-5, Trimethoprim 745-65-3,
Alprostadil 747-36-4, Hydroxychloroquine sulfate 768-94-5,
Amantadine 777-11-7, Haloproglin 797-63-7, Levonorgestrel
826-39-1, Mecamylamine hydrochloride 846-49-1, Lorazepam
846-50-4, Temazepam 859-18-7, Lincomycin hydrochloride 865-21-4,
Vinblastine 866-83-1, Potassium citrate 894-71-3, Nortriptyline
hydrochloride 968-81-0, Acetohexamide 968-93-4, Testolacton
969-33-5, Cyproheptadine hydrochloride 985-16-0, Nafcillin sodium
1069-66-5, Sodium valproate 1070-11-7, Ethambutol hydrochloride
1094-08-2, Ethopropazine hydrochloride 1095-90-5, Methadone
hydrochloride 1098-97-1, Pyritinol 1104-22-9, Meclizine
hydrochloride 1134-47-0, Baclofen 1143-38-0, Anthralin
1151-11-7, Ipodate calcium 1156-19-0, Tolazamide 1173-88-2,
Oxacillin sodium 1197-21-3, Phentermine hydrochloride 1221-56-3,
Ipodate sodium 1225-55-4, Protriptyline hydrochloride 1229-29-4,
Doxepin hydrochloride 1244-76-4 1247-42-3, Meprednisone
1263-89-4, Paromomycin sulfate 1309-48-4, Magnesium oxide,
biological studies 1319-82-0, Aminocaproic acid 1343-97-1,
Selenium sulfate 1393-48-2, Thiostrepton 1400-61-9, Nystatin
1403-17-4, Candicidin 1403-66-3, Gentamicin 1404-00-8, Mitomycin
1404-04-2, Neomycin 1404-88-2, Tyrothricin 1404-93-9, Vancomycin

hydrochloride 1405-10-3, Neomycin sulfate 1405-20-5, Polymyxin b sulfate 1405-87-4, Bacitracin 1405-97-6, Gramicidin 1406-05-9, Penicillin 1420-55-9, Thiethylperazine 1476-53-5, Novobiocin sodium 1492-18-8, Leucovorin calcium 1508-65-2, Oxybutynin chloride 1508-75-4, Tropicamide 1508-76-5, Procyclidine hydrochloride 1524-88-5, Flurandrenolide 1597-82-6, Paramethasone acetate 1617-90-9, Vincamine 1622-61-3, Clonazepam 1622-62-4, Flunitrazepam 1639-60-7, Propoxyphene hydrochloride 1649-18-9, Azaperone 1668-19-5, Doxepin 1707-14-8, Phenmetrazine hydrochloride 1808-12-4, Bromo diphenhydramine hydrochloride 1812-30-2, Bromazepam 1897-96-7, Lonetil 1972-08-3, Dronabinol 1977-10-2, Loxapine 1982-37-2, Methdilazine 2013-58-3, Meclocycline 2022-85-7, Flucytosine 2030-63-9, Clofazimine 2062-78-4, Pimozide 2098-66-0, Cyproterone 2179-37-5, Bencyclane 2315-02-8, Oxymetazoline hydrochloride 2398-96-1, Tolnaftate 2438-32-6, Dexchlorpheniramine maleate 2447-57-6, Sulfadoxine 2589-47-1, Prajmalium bitartrate, biological studies 2609-46-3, Amiloride

(encapsulation of sensitive liq. components into matrix to obtain discrete shelf-stable particles)

IT 2709-56-0, Flupentixol 2898-12-6, Medazepam 3313-26-6, Thiothixene 3385-03-3, Flunisolide 3485-14-1, Cyclacillin 3485-62-9, Clidinium bromide 3486-35-9, Zinc carbonate 3505-38-2, Carbinoxamine maleate 3546-41-6, Pyrvinium pamoate 3572-43-8, Bromhexine 3575-80-2, Melperone 3625-06-7, Mebeverine 3632-91-5, Magnesium gluconate 3778-73-2, Ifosfamide 3810-80-8, Diphenoxylate hydrochloride 3902-71-4, Trioxsalen 3930-20-9, Sotalol 3963-95-9, Methacycline hydrochloride 3978-86-7, Azatadine maleate 4205-90-7, Clonidine 4205-91-8, Clonidine hydrochloride 4330-99-8, Trimeprazine tartrate 4468-02-4, Zinc gluconate 4498-32-2, Dibenzepine 4499-40-5, Oxtriphylline, biological studies 4759-48-2, Isotretinoin 4891-15-0, Estramustine phosphate 5051-62-7, Guanabenz 5104-49-4, Flurbiprofen 5321-32-4, Hetacillin potassium **5355-48-6** 5370-01-4, Mexiletine hydrochloride 5534-09-8, Beclomethasone dipropionate 5536-17-4, Vidarabine 5636-83-9, Dimetindene 5638-76-6, Betahistine 5874-97-5, Metaproterenol sulfate 5875-06-9, Proparacaine hydrochloride 5987-82-6, Benoxinate hydrochloride 6202-23-9, Cyclobenzaprine hydrochloride 6284-40-8, Meglumine 6385-02-0, Meclofenamate sodium 6452-73-9, Oxprenolol hydrochloride 6493-05-6, Pentoxifylline 6533-00-2, Norgestrel 6805-41-0, Aescin 7054-25-3, Quinidine gluconate 7195-27-9, Mefruside 7235-40-7, .beta.-Carotene 7246-21-1, Tyropanoate sodium 7280-37-7, Estropipate 7297-25-8, Erythrityl tetranitrate 7414-83-7, Etidronate disodium 7439-95-4D, Magnesium, salts 7439-96-5, Manganese, biological studies 7439-96-5D, Manganese, salts 7440-39-3D, Barium, salts 7440-69-9, Bismuth, biological studies 7440-70-2D, Calcium, salts

7447-40-7, Potassium chloride, biological studies 7491-74-9,
Piracetam 7632-00-0, Sodium nitrite 7646-85-7, Zinc chloride,
biological studies 7681-11-0, Potassium iodide, biological studies
7681-49-4, Sodium fluoride, biological studies 7681-82-5, Sodium
iodide (NaI), biological studies 7681-93-8, Natamycin 7693-13-2,
Calcium citrate 7720-78-7, Ferrous sulfate 7783-00-8, Selenious
acid 7786-30-3, Magnesium chloride, biological studies
8002-55-9, Myrtol 8017-57-0, Trisulfapyrimidine 8024-48-4,
Casanthranol 8029-99-0, Paregoric 8049-47-6, Pancreatin
8050-81-5, Simethicone 8065-29-0, Liotrix 8067-24-1 9000-92-4,
Amylase 9001-00-7, Bromelin 9001-01-8, Kallidinogenase
9001-62-1, Lipase 9001-73-4, Papain 9001-92-7, Proteinase
9002-07-7, Trypsin 9002-60-2, Corticotropin, biological studies
9002-61-3, Chorionic gonadotropin 9002-86-2, Polyvinyl
chloride 9003-20-7, Polyvinyl acetate 9003-97-8, Polycarbophil
9004-07-3, Chymotrypsin 9004-10-8, Insulin, biological studies
9004-32-4, Carboxymethylcellulose 9004-34-6, Cellulose, biological
studies 9004-70-0, Pyroxylin 9005-25-8, Starch, biological
studies 9005-80-5, Inulin 9008-05-3, Histoplasmin 9012-54-8,
Cellulase 9025-49-4 9025-56-3, Hemicellulase 9032-75-1,
Pectinase 9068-42-2, Pentosanase 10025-73-7, Chromic chloride
10040-45-6, Sodium picosulfate 10238-21-8, Glibenclamide
10246-75-0, Hydroxyzine pamoate 10262-69-8, Maprotiline
10347-81-6, Maprotiline hydrochloride 10379-14-3, Tetrazepam
10418-03-8, Stanazolol 10540-29-1, Tamoxifen 11000-17-2,
Vasopressin 12125-02-9, Ammonium chloride, biological studies
12622-73-0, Coccidioidin 12633-72-6, Amphotericin 12650-69-0,
Mupirocin 13009-99-9, Mafenide acetate 13042-18-7, Fendiline
13292-46-1, Rifampin 13311-84-7, Flutamide 13392-18-2, Fenoterol
13422-51-0, Hydroxocobalamin 13463-67-7, Titanium dioxide,
biological studies 13523-86-9, Pindolol 13614-98-7, Minocycline
hydrochloride 13682-92-3 14009-24-6, Drotaverine 14028-44-5,
Amoxapine 14402-89-2, Sodium nitroprusside 14779-78-3, Padimate
14976-57-9, Clemastine fumarate 15307-86-5, Diclofenac
15622-65-8, Molindone hydrochloride 15663-27-1, Cisplatin
15676-16-1, Sulpiride 15686-51-8, Clemastine 15686-71-2,
Cephalexin 15687-27-1 15687-41-9, Oxyfedrine 16034-77-8,
Iocetamic acid 16051-77-7 16482-55-6 16595-80-5, Levamisole
hydrochloride 16662-47-8, Gallopamil 17140-78-2, Propoxyphene
napsylate 17230-88-5, Danazol 17560-51-9, Metolazone
17617-23-1, Flurazepam 18378-89-7, Plicamycin 18559-94-9,
Salbutamol 19216-56-9, Prazosin 19237-84-4, Prazosin
hydrochloride 19356-17-3, Calcifediol 20830-75-5,
Digoxin 21462-39-5, Clindamycin hydrochloride 21738-42-1,
Oxamniquine 21829-25-4, Nifedipine 22059-60-5, Disopyramide
phosphate 22071-15-4, Ketoprofen 22195-34-2, Guanadrel sulfate
22204-24-6, Pyrantel pamoate 22204-53-1, Naproxen 22232-71-9,
Mazindol 22260-51-1, Bromocriptine mesylate 22316-47-8, Clobazam

22494-42-4, Diflunisal 22916-47-8, Miconazole 23031-25-6,
 Terbutaline 23031-32-5, Terbutaline sulfate 23214-92-8,
 Doxorubicin 23288-49-5, Probucol 23593-75-1, Clotrimazole
 23869-24-1, O-(.beta.-Hydroxyethyl)rutoside 24219-97-4, Mianserin
 24390-14-5, Doxycycline hyclate 24729-96-2, Clindamycin phosphate
 25046-79-1, Glisoxepide 25155-18-4, Methylbenzethonium chloride
 25301-02-4, Tyloxapol 25332-39-2, Trazodone hydrochloride
 25389-94-0, Kanamycin sulfate 25614-03-3, Bromocriptine
 25655-41-8, Povidone iodine 25812-30-0, Gemfibrozil 25953-19-9,
 Cefazolin 26027-38-3, Nonoxynol 9 26171-23-3, Tolmetin
 26605-69-6, Carbenicillin indanyl sodium 26652-09-5, Ritodrine
 26652-10-8 26675-46-7, Isoflurane 26787-78-0, Amoxycillin
 26807-65-8, Indapamide 26839-75-8, Timolol 26944-48-9,
 Glibornuride 27203-92-5, Tramadol 27823-62-7, Chlortetracycline
 bisulfate 28088-64-4, Aminosalicyclic acid 28395-03-1, Bumetanide
 28657-80-9, Cinoxacin 28797-61-7, Pirenzepin 28860-95-9,
 Carbidopa 28911-01-5, Triazolam 28981-97-7, Alprazolam
 29122-68-7, Atenolol 29679-58-1, Fenoprofen 30516-87-1
 30578-37-1, Amezinium metilsulfate **30685-43-9**,
 Metildigoxin 31329-57-4, Naftidrofuryl 31431-39-7, Mebendazole
 31637-97-5, Etofibrate 31828-71-4, Mexiletine 32672-69-8,
 Mesoridazine besylate 32780-64-6, Labetalol hydrochloride
 32887-01-7, Amdinocillin 33005-95-7, Tiaprofenic acid
 33286-22-5, Diltiazem hydrochloride 33402-03-8, Metaraminol
 bitartrate 33419-42-0, Etoposide 33996-33-7, Oxaceprol
 34031-32-8, Auranofin 34183-22-7, Propafenone hydrochloride
 34552-83-5, Loperamide hydrochloride 34580-13-7, Ketotifen
 34787-01-4, Ticarcillin 36322-90-4, Piroxicam 36688-78-5
 36791-04-5, Ribavirin 37270-89-6, Heparin calcium 37341-58-5,
 Phytase 37517-28-5, Amikacin 37517-30-9, Acebutolol
 38194-50-2, Sulindac 38260-01-4, Trientine hydrochloride
 38304-91-5, Minoxidil 38363-40-5, Penbutolol 38396-39-3,
 Bupivacaine 38821-53-3, Cephradine
 (encapsulation of sensitive liq. components into matrix to obtain
 discrete shelf-**stable** particles)

IT 39562-70-4, Nitrendipine 40828-46-4, Suprofen 41859-67-0
 42200-33-9, Nadolol 42399-41-7 42540-40-9, Cefamandole nafate
 49562-28-9 49745-95-1, Dobutamine hydrochloride 50370-12-2,
 Cefadroxil 50679-08-8, Terfenadine 50925-79-6, Colestipol
 50972-17-3, Bacampicillin 51022-69-6, Amcinonide 51481-61-9,
 Cimetidine 51781-06-7, Carteolol 52468-60-7, Flunarizine
 53164-05-9, Acemetacin 53179-11-6, Loperamide 53230-10-7,
 Mefloquine 53608-75-6, Pancrelipase 53994-73-3, Cefaclor
 54063-53-5, Propafenone 54143-55-4, Flecainide 54182-58-0,
 Sucralfate 54504-70-0, Etofylline clofibrate 54965-21-8,
 Albendazole 54965-24-1, Tamoxifen citrate 55268-74-1,
 Praziquantel 55837-25-7, Buflomedil 55837-27-9, Piretanide
 56392-17-7, Metoprolol tartrate 57109-90-7, Dipotassium

chlorazepate 57432-61-8, Methylergonovine maleate 58551-69-2,
 Carboprost tromethamine 59277-89-3, Acyclovir 59865-13-3,
 Cyclosporine 60166-93-0, Iopamidol 60200-06-8, Clorsulon
 61177-45-5, Clavulanate potassium 61563-18-6, Soquinolol
 62571-86-2, Captopril 62893-19-0, Cefoperazone 63527-52-6,
 Cefotaxime 63659-18-7, Betaxolol 64544-07-6, Cefuroxime axetil
 65277-42-1, Ketoconazole 65666-07-1, Silymarin 65899-73-2,
 Tioconazole 66108-95-0, Iohexol 66357-35-5, Ranitidine
 66711-21-5, Apraclonidine 66734-13-2, Alclometasone dipropionate
 68844-77-9, Astemizole 70458-96-7 72558-82-8, Ceftazidime
 74978-16-8, Magaldrate 75330-75-5, Lovastatin 76095-16-4,
 Enalapril maleate 76420-72-9, Enalaprilat 76470-66-1, Loracarbef
 76547-98-3, Lisinopril 76824-35-6, Famotidine 76963-41-2,
 Nizatidine 78110-38-0, Aztreonam 78266-06-5, Mebrofenin
 79350-37-1, Cefixime 81103-11-9, Clarithromycin 83200-10-6,
 Anipamil 83905-01-5, Azithromycin 85721-33-1, Ciprofloxacin
 92665-29-7, Cefprozil 102188-40-9, Acromycin 189752-49-6D, metal
 complexes 198080-50-1 264875-48-1, Tyrothricin-bethamethasone
 mixt.

(encapsulation of sensitive liq. components into matrix to obtain
 discrete shelf-**stable** particles)

IT 144114-21-6, Retropepsin
 (inhibitors; encapsulation of sensitive liq. components into
 matrix to obtain discrete shelf-**stable** particles)

IT 61489-71-2, Menotropin
 (menotrophin; encapsulation of sensitive liq. components into
 matrix to obtain discrete shelf-**stable** particles)

L65 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

2000:105127 Document No. 132:136656 Preservation of vitamin
 C-containing liquid products in containers having oxygen removing
 property. Tanaka, Hirokazu (Mitsubishi Gas Chemical Co., Ltd.,
 Japan). Jpn. Kokai Tokkyo Koho JP 2000043950 A2 20000215, 4 pp.
 (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-207258 19980723.

AB A container, at least a part of which employs a multilayer laminate
 comprising (1) a thermoplastic resin sepg. layer, (2) a
 thermoplastic resin-based O-absorbing layer contg. O-removing
 compns. dispersed therein, and (3) a gas-barrier layer so that the
 layer (1) is toward inside the container, is filled with a vitamin
 C-contg. liq. product, e.g. juice, transfusion soln., etc., sealed,
 held until dissolved O concn. in the product decreases to .ltoreq.1
 ppm, and then heated at 100-150.degree.. The preservation method
 prevents oxidn. and decompn. of vitamin C. A polypropylene side of
 a PET/Al foil/polypropylene laminate was extrusion-laminated with
 ethylene-propylene copolymer contg. CaCl₂-coated Fe powder, and
 further laminated with ethylene-propylene block copolymer to give an
 O-removing laminate. A bag fabricated from the laminate was packed
 with an aq. vitamin C soln. (10 mg/100 mL), heat-sealed, held at

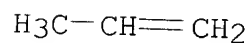
25.degree. for 8 h, and then retorted at 120.degree. for 40 min.
The bag was kept at 25.degree. for 1 mo to show the concn. of
vitamin C 9.8 mg/100 mL.

IT 9003-07-0, Polypropylene
(oxygen-removing layer; preservation of vitamin C-contg. liqs. by
packing in O-removing multilayer laminates and retorting)
RN 9003-07-0 HCAPLUS
CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

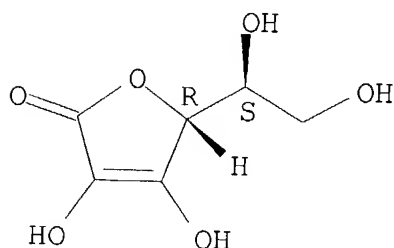
CRN 115-07-1

CMF C3 H6



IT 50-81-7, Vitamin C, biological studies
(preservation of vitamin C-contg. liqs. by packing in O-removing
multilayer laminates and retorting)
RN 50-81-7 HCAPLUS
CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME).

Absolute stereochemistry.



IC ICM B65D081-26
ICS A61K009-00; A23L001-302; B32B007-02; C07D307-62
CC 17-4 (Food and Feed Chemistry)
IT 9003-07-0, Polypropylene
(oxygen-removing layer; preservation of vitamin C-contg. liqs. by
packing in O-removing multilayer laminates and retorting)
IT 50-81-7, Vitamin C, biological studies
(preservation of vitamin C-contg. liqs. by packing in O-removing
multilayer laminates and retorting)
IT 106565-43-9, Ethylene-propylene block **copolymer**
(sepg. layer; **preservation** of vitamin C-contg. liqs. by
packing in O-removing multilayer laminates and retorting)

L65 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

1999:457554 Document No. 131:223446 Modulation of expression of endothelial nitric oxide synthase by nordihydroguaiaretic acid, a phenolic **antioxidant** in cultured endothelial cells. Ramasamy, Santhini; Drummond, Grant R.; Ahn, Joon; Storek, Michal; Pohl, Jan; Parthasarathy, Sampath; Harrison, David G. (Division of Cardiology, Emory University, Atlanta, GA, USA). Molecular Pharmacology, 56(1), 116-123 (English) 1999. CODEN: MOPMA3. ISSN: 0026-895X. Publisher: American Society for Pharmacology and Experimental Therapeutics.

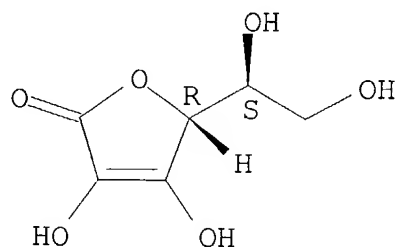
AB Retrospective epidemiol. studies have suggested that **antioxidant** therapy may decrease cardiovascular morbidity and mortality rates, although the mechanisms for this effect remain unclear. In the present study, we demonstrate that selective **antioxidants** can enhance expression of endothelial nitric oxide synthase (eNOS). We found that the **antioxidants** nordihydroguaiaretic acid (NDGA), catechol, glutaryl probucol, and N-acetylcysteine increased eNOS expression in cultured bovine aortic endothelial cells (BAECs). NDGA seemed to be the most potent of the phenolic **antioxidants**, producing a 3-fold increase in eNOS mRNA. This effect of NDGA was enhanced by **nonphenolic antioxidants** such as N-acetylcysteine and ascorbic acid. Nuclear run-on studies indicated that NDGA increased eNOS transcription. A similar increase in eNOS protein content was obsd. with Western blot anal. after treating BAECs or human aortic endothelial cells with NDGA. Exposure of BAECs to NDGA enhanced NO prodn., as measured by ESR spin trapping and eNOS activity, as measured by [14C]arginine-to-[14C]citrulline assay. Methylation of the phenolic hydroxyl groups completely inhibited the NDGA effect on eNOS mRNA levels. This effect of NDGA was not due to inhibition of lipoxygenase because cis-5,8,11,14-eicosatetraynoic acid did not alter eNOS expression. We conclude that **antioxidants** may not only increase the bioactivity of nitric oxide but also enhance expression of the eNOS enzyme. Such an effect may prove useful in conditions such as hypertension and atherosclerosis, in which nitric oxide prodn. and/or biol. activity is impaired.

IT 50-81-7, L-Ascorbic acid, biological studies
(phenolic **antioxidants** modulation of endothelial nitric oxide synthase)

RN 50-81-7 HCAPLUS

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



- CC 1-12 (Pharmacology)
 ST phenolic **antioxidant** endothelial nitric oxide synthase
 IT Antiarteriosclerotics
 (antiatherosclerotics; phenolic **antioxidants** modulation
 of endothelial nitric oxide synthase)
 IT Artery
 (endothelium; phenolic **antioxidants** modulation of
 endothelial nitric oxide synthase)
 IT Gene, animal
 mRNA
 (for eNOS; phenolic **antioxidants** modulation of
 endothelial nitric oxide synthase)
 IT Antihypertensives
 Antioxidants
 Transcription, genetic
 Vasodilators
 (phenolic **antioxidants** modulation of endothelial nitric
 oxide synthase)
 IT 50-81-7, L-Ascorbic acid, biological studies 120-80-9,
 Catechol, biological studies 500-38-9, Nordihydroguaiaretic acid
 616-91-1, N-Acetylcysteine 23288-49-5
 (phenolic **antioxidants** modulation of endothelial nitric
 oxide synthase)
 IT 10102-43-9, Nitric oxide, biological studies 125978-95-2, Nitric
 oxide synthase
 (phenolic **antioxidants** modulation of endothelial nitric
 oxide synthase)
 IT 9029-60-1, Lipxygenase
 (phenolic **antioxidants** modulation of endothelial nitric
 oxide synthase)

L65 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
 1999:249029 Document No. 130:286821 **Stable** cosmetic
 water-in-oil-in-water emulsion containing carboxylic acid polymers
 and crosslinked poly(acrylamidomethylpropane sulfonic acid).
 Afriat, Isabelle; Chanvin, Florence; Guiramand, Carole (L'Oreal,
 Fr.). Eur. Pat. Appl. EP 908170 A1 19990414, 17 pp. DESIGNATED

STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (French). CODEN: EPXXDW.
APPLICATION: EP 1998-402250 19980911. PRIORITY: FR 1997-12364 19971003.

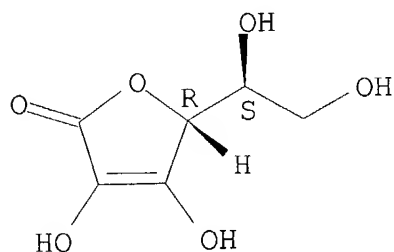
AB The title cosmetic emulsion which are used for cleansing or protection of skin, mucosa and hair are disclosed.
Poly(2-acrylamido-2-methylpropane sulfonic acid) was crosslinked with trimethylolpropane triacrylate and neutralized with ammonia. Formulation of a triple emulsion contg. 2% of above polymer is disclosed.

IT 50-81-7, Ascorbic acid, biological studies
(**stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))

RN 50-81-7 HCAPLUS

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K007-00

ICS A61K007-48

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 35, 38

ST **stability** cosmetic emulsion carboxylic acid polymer;
crosslinking polyacrylamidomethylpropane sulfonic acid cosmetic emulsion

IT Fats and Glyceridic oils, biological studies
(animal; **stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))

IT Polyoxyalkylenes, biological studies
(di-Me, Me hydrogen polysiloxane-, alkyl derivs.; **stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))

IT Polysiloxanes, biological studies
(di-Me, Me hydrogen, polyoxyalkylene-, alkyl derivs.; **stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))

- IT Cosmetics
 (emulsions; **stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))
- IT Polysiloxanes, biological studies
 (fluoro; **stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))
- IT Carboxylic acids, biological studies
 (hydroxy; **stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))
- IT Polysiloxanes, biological studies
 (phenyltrimethyl; **stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))
- IT Alcohols, biological studies
 (polyhydric; **stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))
- IT **Antioxidants**
 Deodorants
 Dyes
 Hair preparations
 Mucous membrane
 Perfumes
 Preservatives
 Sequestering agents
 Solvents
 Sunscreens
 (**stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))
- IT Enzymes, biological studies
 Isoalkanes
 Lipids, biological studies
 Paraffin oils
 Polysiloxanes, biological studies
 Vitamins
 Waxes
 (**stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))
- IT Fats and Glyceridic oils, biological studies
 (vegetable; **stable** cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))
- IT 50-21-5, biological studies 50-81-7, Ascorbic acid,

biological studies 57-13-6, Urea, biological studies 68-26-8, Retinol 69-72-7, Salicylic acid, biological studies 76-93-7, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 80-69-3, Tartronic acid 87-69-4, biological studies 90-64-2, Mandelic acid 110-17-8, 2-Butenedioic acid (2E)-, biological studies 127-17-3, Pyruvic acid, biological studies 153-18-4, Rutin 302-79-4, Retinoic acid 331-39-5 501-30-4, Kojic acid 526-95-4, D-Gluconic acid 544-57-0, 2-Hydroxytetracosanoic acid 547-64-8, Methyllactate 600-15-7, 2-Hydroxybutanoic acid 617-31-2, 2-Hydroxypentanoic acid 617-73-2, 2-Hydroxyoctanoic acid 629-22-1, 2-Hydroxyoctadecanoic acid 636-69-1, 2-Hydroxyheptanoic acid 685-73-4, Galacturonic acid 764-67-0, 2-Hydroxyhexadecanoic acid 828-01-3 2507-55-3, 2-Hydroxytetradecanoic acid 2984-55-6, 2-Hydroxydodecanoic acid 5393-81-7, 2-Hydroxydecanoic acid 6064-63-7, 2-Hydroxyhexanoic acid 6556-12-3, Glucuronic acid 6915-15-7, Malic acid 7664-38-2D, Phosphoric acid, glycosylated derivs., biological studies 9016-00-6, Polydimethylsiloxane 15896-36-3, 2-Hydroxynonanoic acid 16742-48-6, 2-Hydroxyeicosanoic acid 17812-24-7, Ribonic acid 17941-34-3, Aleuritic acid 19790-86-4, 2-Hydroxyundecanoic acid 31900-57-9, Polydimethylsiloxane 191226-60-5

(stable cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))

IT 202000-47-3P

(stable cosmetic emulsion contg. carboxylic acid polymers and crosslinked poly(acrylamidomethylpropane sulfonic acid))

L65 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

1997:710918 Document No. 128:3142 Active polymer films for packaging of meat products. Makarevich, A. V.; Ukhartseva, I. Yu.; Gol'dade, V. A.; Parkalova, E. I. (Russia). *Plasticheskie Massy* (4), 51-53 (Russian) 1995. CODEN: PLMSAI. ISSN: 0554-2901. Publisher: NPAOZT "Plastmassy".

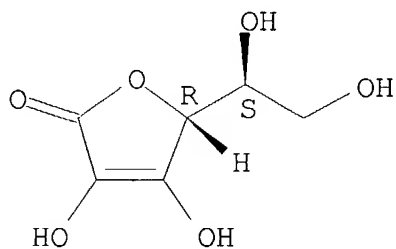
AB Incorporation of preservatives (e.g., ascorbic acid, benzoic acid, glucose, coriander oil) into polyethylene film afforded an extra means of preserving packaged meat. Thus, the shelf-life of beef could be extended 2-3-fold by using the active film.

IT 50-81-7, Ascorbic acid, biological studies
(active polymer films for packaging of meat products)

RN 50-81-7 HCAPLUS

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

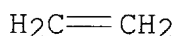
Absolute stereochemistry.



IT 9002-88-4, Polyethylene
 (active polymer films for packaging of meat products)
 RN 9002-88-4 HCAPLUS
 CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1
 CMF C2 H4



CC 17-7 (Food and Feed Chemistry)
 Section cross-reference(s): 37

IT Food **preservatives**
 (active **polymer** films for packaging of meat products)

IT 50-81-7, Ascorbic acid, biological studies 50-99-7,
 Glucose, biological studies 65-85-0, Benzoic acid, biological
 studies
 (active polymer films for packaging of meat products)

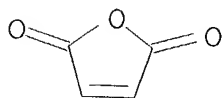
IT 9002-88-4, Polyethylene
 (active polymer films for packaging of meat products)

L65 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
 1996:392042 Document No. 125:88658 Process for the preparation of
stable water based stock solutions of crosslinked lower
 alkyl vinyl ether and maleic anhydride copolymers and hydrogel
 product of the process. Kwak, Yoon T.; Kopolow, Stephen L.; Login,
 Robert B. (ISP Investments Inc., USA). U.S. US 5516828 A 19960514,
 4 pp., Division of U.S. Ser. No. 359, 096. (English). CODEN:
 USXXAM. APPLICATION: US 1995-528382 19950913. PRIORITY: US
 1994-359096 19941219.

AB This invention relates to **stable** colorless concs. and
 stock solns. of 1-5% crosslinked lower alkyl vinyl ether-maleic
 anhydride copolymers having a Brookfield viscosity of up to about

25,000 cps and to the process for their prepn. The alkyl vinyl ethers are those of C1-C4, preferably Me and Et vinyl ethers. The crosslinking agents used are .alpha.,.omega.-unsatd. C6-C8 alkadienes or divinylbenzene.

- IT 108-31-6D, Maleic anhydride, polymers with alkyl vinyl ethers, alkadiene-crosslinked
 (prepn. of **stable** water-based stock solns. of crosslinked lower alkyl vinyl ether-maleic anhydride copolymers and hydrogel product of the process)
- RN 108-31-6 HCAPLUS
- CN 2,5-Furandione (9CI) (CA INDEX NAME)



- IC ICM C08K003-10
- NCL 524401000
- CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 46, 62, 63
- ST **stable** aq thickener maleic anhydride copolymer; vinyl ether maleic anhydride copolymer soln; diene crosslinked maleic anhydride copolymer thickener
- IT 128-37-0, BHT, uses 1406-18-4, Vitamin E
 (antioxidant; prepn. of **stable** water-based stock solns. of crosslinked lower alkyl vinyl ether-maleic anhydride copolymers and hydrogel product of the process)
- IT 108-31-6D, Maleic anhydride, polymers with alkyl vinyl ethers, alkadiene-crosslinked 26711-22-8D, Ethyl vinyl ether-maleic anhydride copolymer, alkadiene-crosslinked 178695-36-8
 (prepn. of **stable** water-based stock solns. of crosslinked lower alkyl vinyl ether-maleic anhydride copolymers and hydrogel product of the process)
- IT 532-32-1, Sodium benzoate
 (preservative; prepn. of **stable** water-based stock solns. of crosslinked lower alkyl vinyl ether-maleic anhydride copolymers and hydrogel product of the process)
- L65 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
 1995:869802 Document No. 123:342855 Laminated packaging films containing polyethylene. Fujii, Toshio; Kato, Kazuhiro; Kondo, Toyomitsu (Mitsubishi Kagaku Kk, Japan). Jpn. Kokai Tokkyo Koho JP 07195636 A2 19950801 Heisei, 6 pp. (Japanese). CODEN: JKXXAF.
 APPLICATION: JP 1993-349466 19931228.
- AB The title films comprise outer layers, middle layers, and inner

layers, in which the outer and inner layers comprise polyethylene compns. with d. 0.920-0.935 g/cm³ and extrusion coeff. (EC) 6.5-14 g₂/10 min and the contents of phenol-based **antioxidants** .1toreq.100 ppm. The films are useful for packaging of food, etc. Thus, outer and inner layer-forming polyethylene (d. 0.925 g/cm³, EC 9.5 g₂/10 min) and middle layer-forming nylon 6 were laminated using adhesive layers comprising maleated polyethylene to give a film showing good transparency, heat resistance, cutting property, and adhesion strength. The film did not show discoloration by **preservation** at 25.degree. under dark for 2 wk.

IT 9002-88-4DP, Polyethylene, maleated
(adhesive layers; laminated packaging films contg. polyethylene with low contents of phenol-based **antioxidants** at outer and inner layers with good **stability**, heat resistance, and cutting property)

RN 9002-88-4 HCAPLUS

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1

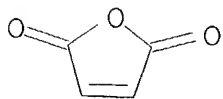
CMF C2 H4



IT 108-31-6DP, Maleic anhydride, reaction products with polyethylene
(adhesives; laminated packaging films contg. polyethylene with low contents of phenol-based **antioxidants** at outer and inner layers with good **stability**, heat resistance, and cutting property)

RN 108-31-6 HCAPLUS

CN 2,5-Furandione (9CI) (CA INDEX NAME)



IT 9002-88-4, Polyethylene
(outer layers; laminated packaging films contg. polyethylene with low contents of phenol-based **antioxidants** at outer and inner layers with good **stability**, heat resistance, and cutting property)

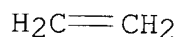
RN 9002-88-4 HCAPLUS

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1

CMF C2 H4



IC ICM B32B027-32

ICS B32B007-02; B32B027-18

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 17

ST packaging laminated film polyethylene polyamide; phenolic
antioxidant packaging film polyethylene; discoloration
prevention packaging film polyethylene; heat resistance polyethylene
film packaging; transparency polyethylene film packaging; extrusion
coeff polyethylene film packaging

IT Discoloration prevention

Food

Heat-resistant materials

Transparent materials

(laminated packaging films contg. polyethylene with low contents
of phenol-based **antioxidants** at outer and inner layers
with good **stability**, heat resistance, and cutting
property)

IT Plastics, film

Plastics, laminated

(laminated packaging films contg. polyethylene with low contents
of phenol-based **antioxidants** at outer and inner layers
with good **stability**, heat resistance, and cutting
property)

IT Polyamides, uses

(middle layers; laminated packaging films contg. polyethylene
with low contents of phenol-based **antioxidants** at outer
and inner layers with good **stability**, heat resistance,
and cutting property)

IT **Antioxidants**

(phenol-based; laminated packaging films contg. polyethylene with
low contents of phenol-based **antioxidants** at outer and
inner layers with good **stability**, heat resistance, and
cutting property)

IT Phenols, miscellaneous

(compds., **antioxidants**; laminated packaging films
contg. polyethylene with low contents of phenol-based
antioxidants at outer and inner layers with good

- stability**, heat resistance, and cutting property)
- IT Packaging materials
(films, laminated packaging films contg. polyethylene with low contents of phenol-based **antioxidants** at outer and inner layers with good **stability**, heat resistance, and cutting property)
- IT 9002-88-4DP, Polyethylene, maleated
(adhesive layers; laminated packaging films contg. polyethylene with low contents of phenol-based **antioxidants** at outer and inner layers with good **stability**, heat resistance, and cutting property)
- IT 108-31-6DP, Maleic anhydride, reaction products with polyethylene
(adhesives; laminated packaging films contg. polyethylene with low contents of phenol-based **antioxidants** at outer and inner layers with good **stability**, heat resistance, and cutting property)
- IT 25038-54-4, Nylon 6, uses
(middle layers; laminated packaging films contg. polyethylene with low contents of phenol-based **antioxidants** at outer and inner layers with good **stability**, heat resistance, and cutting property)
- IT 9002-88-4, Polyethylene
(outer layers; laminated packaging films contg. polyethylene with low contents of phenol-based **antioxidants** at outer and inner layers with good **stability**, heat resistance, and cutting property)

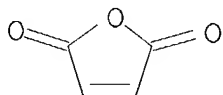
L65 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

1995:708312 Document No. 123:84333 Water-soluble and air-drying resin for use in coatings. Dekker, Gerrit Hendrik; Hendriks, Johannes Wilhelmus Maria; Pons, Dick Adriaan (DSM N.V., Neth.). PCT Int. Appl. WO 9418260 A1 19940818, 14 pp. DESIGNATED STATES: W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, UZ, VN; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2.

AB APPLICATION: WO 1994-NL19 19940127. PRIORITY: BE 1993-118 19930209.
A H₂O-sol. and air drying resin comprises units of (A) a monoether of a polyethylene glycol having 5-100 ethylene oxide units/mol. and (B) the reaction product of (B1) .gtoreq.1 unsatd. fatty acids or .gtoreq.1 polyalc.(s) esterified with unsatd. fatty acids with (B2) an .alpha.,.beta.-ethylenically unsatd. carboxyl compd. at A:B molar ratio .apprx.0.2-4:1. The resin can be used as a dispersing agent in a wood preservative and in a pigment paste contributing to good gloss in paints. Linseed oil was maleated to give a product having acid no. 115 mg KOH/g, which was subsequently esterified with methoxy polyethylene glycol to give resin (I) having I value 110 g

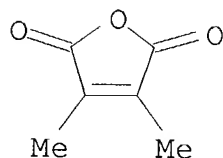
I/100 g resin and acid no. 35 mg KOH/g. A pigment paste contg. I was formulated into an alkyd paint showing 20 .degree. gloss 95, vs. 83 for pigment paste contg. Borchigen DFN instead of I.

- IT 108-31-6DP, Maleic anhydride, linseed oil adduct, ester with methoxy polyethylene glycol
(water-sol. and air-drying resin for use in coatings)
RN 108-31-6 HCAPLUS
CN 2,5-Furandione (9CI) (CA INDEX NAME)



- IC ICM C08G065-32
ICS C08L071-02; C09D017-00
CC 35-5 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 42
ST water sol air drying unsatd resin; maleic anhydride adduct resin water sol; linseed oil adduct resin water sol; methoxy polyethylene glycol adduct water sol; pigment dispersant air drying resin; wood **preservative** air drying resin dispersant
IT 108-31-6DP, Maleic anhydride, linseed oil adduct, ester with methoxy polyethylene glycol 25322-68-3DP, Polyethylene glycol, ester with maleated linseed oil
(water-sol. and air-drying resin for use in coatings)
L65 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
1994:269617 Document No. 120:269617 Synthesis of methyl (Z)- and (E)-2-methyl(3-D)propenoates and their incorporation into polymethacrylates. Keah, Hooi Hong; Rae, Ian D. (Fac. Sci., Monash Univ., Clayton, 3168, Australia). Australian Journal of Chemistry, 46(12), 1919-28 (English) 1993. CODEN: AJCHAS. ISSN: 0004-9425.
AB Me (E)- and (Z)-2-methyl(3-D)propenoates were prepd. from (E)-3-bromo-2-methylpropenoic acid. Polymn. by free radical methods led to random incorporation, but anionic **polymn.** **preserved** labeling specificity, and the ¹H NMR spectra of the labeled polymers confirm earlier assignments. Di-Me 2,3-dimethylbutanoate was prepd. by two new methods from dimethylmaleic anhydride and converted by anionic polymn. into a methacrylate polymer with a head-to-head linkage approx. in the center of the chain. Thermal degrdn. of this polymer could only be achieved at temps. so high that labeled monomers were themselves isomerized. Methacrylate polymers produced by anionic polymn. in the presence of diisopropylamine do not exhibit the isotacticity found with this form of polymn.
IT 766-39-2

(ring opening and sequential hydrogenation of)
RN 766-39-2 HCAPLUS
CN 2,5-Furandione, 3,4-dimethyl- (9CI) (CA INDEX NAME)



CC 23-17 (Aliphatic Compounds)
Section cross-reference(s): 35
IT 766-39-2
(ring opening and sequential hydrogenation of)

L65 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
1990:215438 Document No. 112:215438 Food packaging materials
containing polyolefin resins, olefin-vinyl alc. resins, and block
graft copolymers. Watanabe, Kazuyuki; Kira, Koichi (Showa Denko K.
K., Japan). Jpn. Kokai Tokkyo Koho JP 01313552 A2 19891219 Heisei,
7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-146044
19880613.

AB Food packaging materials contg. thermoplastic polyolefin resins
5-70, olefin-vinyl alc. resins 30-90, and modified copolymers, are
manufd. by graft polymn. of unsatd. carboxylic acids onto 100 wt.
parts hydrogenated vinyl arom. compd.-conjugated diene block
copolymers, 2-20 wt.%. The materials can be heat-sealed and
preserve flavor of foods (e.g. juice, coffee, retort foods). Kraton
G1652 (styrene-ethylene-butylene block copolymer) was modified with
maleic anhydride in the presence of dicumyl peroxide in an extruder
at 240.degree. to give 2.8 wt. parts maleic anhydride-contg.
modified block copolymer, which (5 wt.%) was pelletized with 47.5
wt.% Sho-Allomer FD432 (polypropylene) and 47.5 wt.% Eval EPF101
(ethylene-vinyl alc. copolymer) and made into a film. Five flavors
were preserved in a pouch made of the film (inner side), Al foil,
and polyethylene terephthalate film at 23.degree. for 50 days with
little adsorption by the film.

IT 9002-88-4, Sholex L 170 9003-07-0, Shoallomer FD
432

(food packaging materials contg. olefin-vinyl alc. resins and
block graft copolymers and, for flavor preservation)

RN 9002-88-4 HCAPLUS
CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1
CMF C2 H4



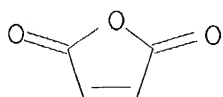
RN 9003-07-0 HCAPLUS
CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115-07-1
CMF C3 H6



IT 108-31-6D, 2,5-Furandione, reaction product with
styrene-ethylene-butylene block copolymer
(food packaging materials contg. polyolefin resins and
olefin-vinyl alc. resins and, for flavor preservation)
RN 108-31-6 HCAPLUS
CN 2,5-Furandione (9CI) (CA INDEX NAME)



IC ICM C08L029-04
ICS C08L023-00
ICA A23L002-00; A23L003-00
ICI C08L023-00, C08L053-02
CC 17-4 (Food and Feed Chemistry)
ST package food graft block copolymer; flavor **preservation**
food package **polymer**
IT 9002-88-4, Shoalex L 170 9003-07-0, Shoallomer FD
432
(food packaging materials contg. olefin-vinyl alc. resins and
block graft copolymers and, for flavor preservation)
IT 108-31-6D, 2,5-Furandione, reaction product with
styrene-ethylene-butylene block copolymer 106108-28-5D,
Butylene-ethylene-styrene block copolymer, reaction product with
maleic anhydride
(food packaging materials contg. polyolefin resins and

olefin-vinyl alc. resins and, for flavor preservation)

L65 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

1988:456757 Document No. 109:56757 Thermosetting alkyd resin lithographic printing inks for metals. Kitani, Yasuo; Yoshida, Yuji (Mitsubishi Petrochemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 63000367 A2 19880105 Showa, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-81863 19860409.

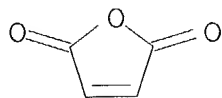
AB The title storage-**stable** inks, thermally cured to products with good discoloration resistance, flexural resistance, hardness, gloss and smoothness, comprise 50-90 parts oil-modified alkyd resins (A) contg. 30-80% oils, 10-50 parts polyether polyol (meth)acrylates [B; liq. at 20.degree., sol. in the alkyd resins, av. mol. wt. [Ma; based on per (meth)acryloxy] .ltoreq. 500] [prepd. from polyols derived from an initiator contg. n **nonphenolic** OH and m mol ethylene oxide and/or propylene oxide (per mol initiator) and (meth)acrylic acid with n = 2-6, m/n 1-6], 0-20 parts (meth)acrylic esters (C) having .gtoreq.3 (meth)acryloxy groups and Ma .ltoreq.300 and 0-0.01% (based on 100 parts A + B + C) Co- or Mn-contg. driers. Thus, a varnish contg. A (fatty acids of dehydrated castor oil, phthalic anhydride, glycerol, and neopentyl glycol) 60, trimethylolpropane-ethylene oxide adduct trimethacrylate 40 and TiO2 100 parts and showing good storage **stability** after 1 wk storage at 50.degree. or 5.degree. was spread on a steel plate, printed, and dried at 150.degree. for 10 min to form a tack-free product with good flexural resistance (JIS K 5400), hardness (JIS K 5025), and nonyellowing after heating at 150.degree. for 0.5 h.

IT 108-31-6D, 2,5-Furandione, reaction products with alloocimene, polymers with fatty acids, polyols and polyether polyol (meth)acrylates

(manuf. of varnishes contg., storage-**stable**, for lithog. printing inks for metals)

RN 108-31-6 HCAPLUS

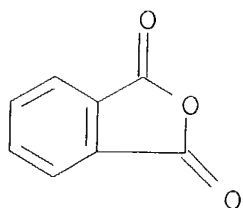
CN 2,5-Furandione (9CI) (CA INDEX NAME)



IT 85-44-9DP, Phthalic anhydride, polymers with fatty acids, polyols and polyether polyol (meth)acrylates (manuf. of, varnishes contg., storage-**stable**, for lithog. printing inks for metals)

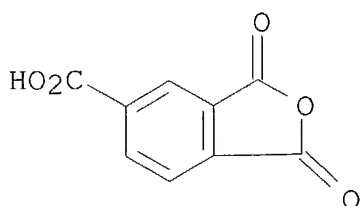
RN 85-44-9 HCAPLUS

CN 1,3-Isobenzofurandione (9CI) (CA INDEX NAME)



- IC ICM C09D003-66
- CC 42-12 (Coatings, Inks, and Related Products)
Section cross-reference(s): 55, 56, 74
- ST oil modified alkyd resin ink; polyether polyol methacrylate ink; polymethacryloxy compd alkyd resin ink; storage **stability** alkyd **resin** ink; hardness alkyd resin ink metal; smoothness alkyd resin ink metal; gloss alkyd resin ink metal; nonyellowing alkyd resin ink metal; lithog printing ink metal; polyester polyacrylate lithog thermosetting ink; polyoxyalkylene methacrylate ink
- IT Metals, uses and miscellaneous
(oil-modified alkyd resin-contg. inks for, storage-**stable**, with good discoloration resistance)
- IT Inks
(lithog., thermosetting, contg. oil-modified alkyd resin and polyether polyol (meth)acrylate, storage-**stable**, with good discoloration resistance, for metals)
- IT **108-31-6D**, 2,5-Furandione, reaction products with alloocimene, polymers with fatty acids, polyols and polyether polyol (meth)acrylates **673-84-7D**, reaction products with maleic anhydride, polymers with fatty acids, polyols and polyether polyol (meth)acrylates
(manuf. of varnishes contg., storage-**stable**, for lithog. printing inks for metals)
- IT **29570-58-9D**, polymers with oil-modified alkyd resins **62886-89-9D**, Aronix M 8060, polymers with oil-modified alkyd resins **77866-18-3D**, polymers with oil-modified alkyd resins **82727-34-2D**, polymers with oil-modified alkyd resins **115218-20-7D**, polymers with oil-modified alkyd resins
(manuf. of varnishes contg., storage-**stable**, for lithog. printing inks, for metals)
- IT **56-81-5DP**, Glycerol, polymers with dicarboxylic acids, fatty acids of oils, and polyether polyol (meth)acrylates **85-44-9DP**, Phthalic anhydride, polymers with fatty acids, polyols and polyether polyol (meth)acrylates **110-44-1DP**, Sorbic acid, polymers with fatty acids, polyols and polyether polyol (meth)acrylates **115-77-5DP**, Pentaerythritol, polymers with dicarboxylic acids, fatty acids of oils, and polyether polyol (meth)acrylates **126-30-7DP**, Neopentyl glycol, polymers with dicarboxylic acids, fatty acids, and

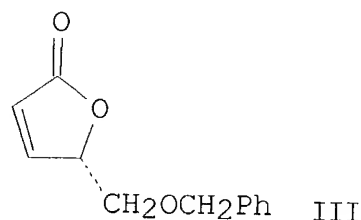
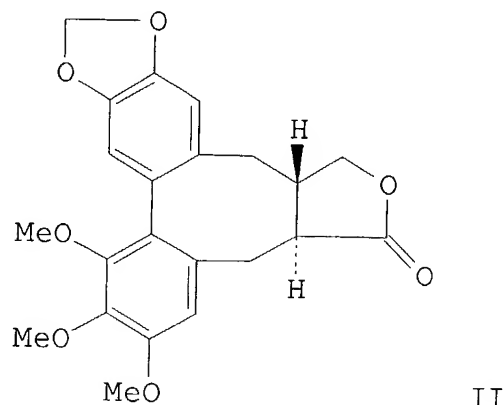
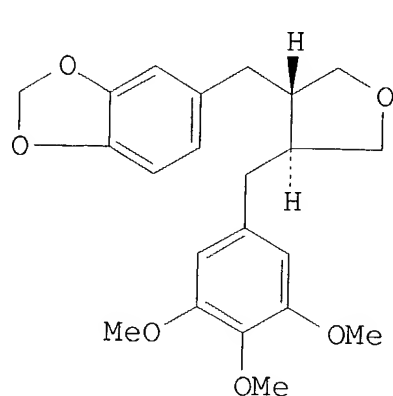
- polyether polyol (meth)acrylates 115461-14-8P
(manuf. of, varnishes contg., storage-stable, for
lithog. printing inks for metals)
- IT 12597-69-2, Steel, uses and miscellaneous
(oil-modified alkyd resin-contg. inks for, storage-stable
, with good discoloration resistance)
- L65 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
1983:73959 Document No. 98:73959 Electroinsulating heat-resistant
varnishes. Matulay, Dusan; Binova, Gabriela (Czech.). Czech. CS
202970 B 19821015, 5 pp. (Slovak). CODEN: CZXXA9. APPLICATION:
CS 1979-4196 19790618.
- AB Poly(ester-imide) electroinsulation varnishes for elec. motor
windings, withstanding permanent temp. stress .ltoreq.200.degree.,
consist of a **nonphenolic** soln. of a resin contg. 15-40%
arom. imide bonded by COOH groups to a polyester prepd. from
isophthalic acid (I) (contg. .gtoreq.20% I), 5-20% satd. fatty
acids, alkyl derivs. of arom. dicarboxylic acids, 5-40%
tris(hydroxyethyl) isocyanurate (II) and other triols and diols,
partially blocked polyisocyanate (25-50% on the resin) as a
crosslinking agent, and 0.02-0.1% metal compds. or complexes as
crosslinking catalysts. Thus, di-Me terephthalate 136, ethylene
glycol 34, glycerol 46, II 92, and Zn acetate 0.18 g were
transesterified at 160-80.degree. until 38 g MeOH was distd. off and
n20 of the mixt. was 1.542-1.543, and 43 g mixt. of fatty acids and
50 g I were added and heated to 220.degree. to give a polyester with
acid no. 14-17 mg KOH/g. A mixt. of trimellitic anhydride 66,
4,4'-diaminodiphenylmethane 34, and Cd(OAc)2.2H2O 0.84 g was added
to the polyester at 190.degree. in 3 parts and imidation was carried
out at 230.degree. to acid no. <10 mg KOH/g and OH concn. 3.8-4.8%.
A 40% soln. of the resulting resin in cyclohexanone (III)
[108-94-1] and xylene [1330-20-7] 1000, a 50% III soln. of Desmodur
CT **Stable** [68456-07-5] 175, and Zn octoate [557-09-5] 1
g gave an insulation varnish, which, after hardening at 120 and
150.degree., had elec. strength 100-150 and 60-70 kV/mm, resp., and
sp. resistance 1013-14 and 107-8 .OMEGA./mm at 23 and 210.degree.,
resp.
- IT 552-30-7D, polymers with diaminodiphenylmethane, di-Me
terephthalate, ethylene glycol, fatty acids, glycerol, and
tris(hydroxyethyl) isocyanurate
(curable heat-resistant electroinsulating varnishes based on)
- RN 552-30-7 HCAPLUS
- CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo- (9CI) (CA
INDEX NAME)



IC C09D005-25
CC 42-8 (Coatings, Inks, and Related Products)
IT 56-81-5D, polymers with diaminodiphenylmethane, di-Me terphthalate, ethylene glycol, fatty acids, isophthalic acid, trimellitic anhydride, and tris(hydroxyethyl) isocyanurate 101-77-9D, polymers with di-Me terephthalate, ethylene glycol, fatty acids, glycerol, isophthalic acid, trimellitic anhydride, and tris(hydroxyethyl) isocyanurate 107-21-1D, polymers with diaminodiphenylmethane, di-Me terephthalate, fatty acids, glycerol, isophthalic acid, trimellitic anhydride, and tris(hydroxyethyl) isocyanurate 120-61-6D, polymers with diaminodiphenylmethane, ethylene glycol, fatty acids, glycerol, isophthalic acid, trimellitic anhydride, and tris(hydroxyethyl) isocyanurate 121-91-5D, polymers with diaminodiphenylmethane, di-Me terephthalate, ethylene glycol, fatty acids, glycerol, trimellitic anhydride, and tris(hydroxyethyl) isocyanurate 552-30-7D, polymers with diaminodiphenylmethane, di-Me terephthalate, ethylene glycol, fatty acids, glycerol, and tris(hydroxyethyl) isocyanurate 839-90-7D, polymers with diaminodiphenylmethane, di-Me terephthalate, ethylene glycol, fatty acids, glycerol, and trimellitic anhydride (curable heat-resistant electroinsulating varnishes based on)

L65 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
1980:180880 Document No. 92:180880 Asymmetric total synthesis of the antileukemic lignans (+)-trans-burseran and (-)-isostegane. Tomioka, Kiyoshi; Ishiguro, Tsuneo; Koga, Kenji (Fac. Pharm. Sci., Univ. Tokyo, Tokyo, 113, Japan). Journal of the Chemical Society, Chemical Communications (15), 652-3 (English) 1979. CODEN: JCCCAT. ISSN: 0022-4936.

GI



AB (+)-trans-Burseran (I) and (-)-isostegane (II) were prepd. from the chiral butenolide (III) by a highly specific asym. path. III was converted to (+)-deoxypodorhizon (IV) by sequential conjugate addn. of trimethoxybenzaldehyde dithioacetal anion, redn. (Raney Ni), LiAlH_4 redn., NaIO_4 oxidn., and Collins oxidn. Nonphenolic oxidative coupling of IV gave II. Sequential treatment of IV with LiAlH_4 and $p\text{-MeC}_6\text{H}_4\text{SO}_2\text{Cl}$ gave I.

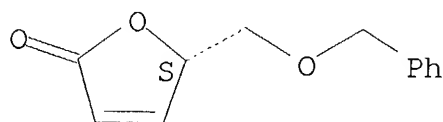
IT 72605-53-9P

(prepn. of, as intermediate in prepn. of antileukemic lignan)

RN 72605-53-9 HCAPLUS

CN 2(5H)-Furanone, 5-[(phenylmethoxy)methyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



CC 27-6 (Heterocyclic Compounds (One Hetero Atom))

IT 72605-52-8P 72605-53-9P 72605-54-0P 72627-52-2P

72627-53-3P 72627-54-4P 72690-16-5P

(prepn. of, as intermediate in prepn. of antileukemic lignan)

L65 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

1977:407135 Document No. 87:7135 Laminated plastics. Inoue, Takayuki; Kakizaki, Tetsuji; Ochiuni, Masahide (Mitsubishi Petrochemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 52032080 19770310 Showa, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1975-107877 19750905.

AB Laminated products, with water vapor transmission .ltoreq.10 g/m2-24 h and O transmission .ltoreq.200 mL/m2-24h-atm and useful for preservation of food, were prepd. by laminating a layer (A) of Arnite A 200 [poly(ethylene terephthalate)] (I) [25038-59-9] with a layer (B) contg. a polyolefin or a vinyl polymer modified with 0.01-10 wt.% maleic anhydride (II) [108-31-6] to give a laminate with the thickness of A .ltoreq.50% that of B. Thus, 100 parts polypropylene (III) [9003-07-0] was treated with 1.2 parts II in the presence of 0.8 part Bz202 at 220.degree. in an extruder to give a product (IV). A blend (contg. 10 parts IV and 90 parts III) and I were blow-molded together through a die to give a bottle with interlayer bond strength 0.5 kg/15mm, compared with 0 kg/15 mm for a laminate of III with I.

IT 9002-88-4

(laminates of maleic anhydride-contg., with poly(ethylene terephthalate), for food preservation)

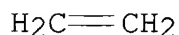
RN 9002-88-4 HCAPLUS

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1

CMF C2 H4



IT 9003-07-0

(laminates of maleic anhydride-contg., with poly(ethylene terephthalate), for food preservation)

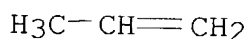
RN 9003-07-0 HCAPLUS

CN 1-Propene, homopolymer (9CI) (CA INDEX NAME)

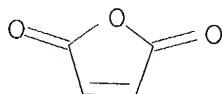
CM 1

CRN 115-07-1

CMF C3 H6

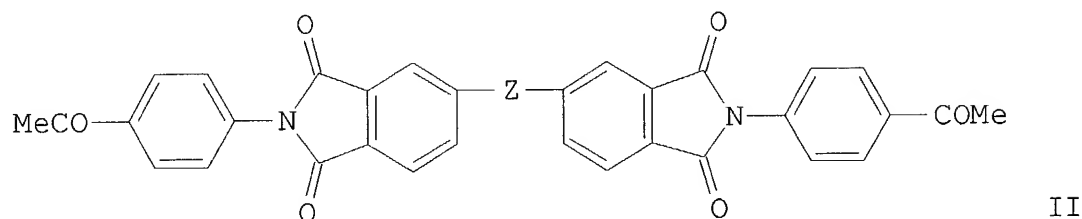
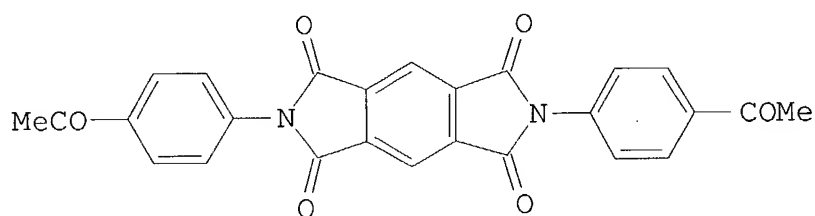


IT 108-31-6, uses and miscellaneous
(laminates of polypropylene contg., with polyesters, for food
preservation)
RN 108-31-6 HCAPLUS
CN 2,5-Furandione (9CI) (CA INDEX NAME)



IC B32B027-32
CC 37-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 17
IT Polyesters, uses and miscellaneous
(laminates with polyolefins or vinyl polymers, for food
preservation)
IT 9002-88-4
(laminates of maleic anhydride-contg., with poly(ethylene
terephthalate), for food preservation)
IT 9003-07-0 24937-78-8
(laminates of maleic anhydride-contg., with poly(ethylene
terephthalate), for food preservation)
IT 108-31-6, uses and miscellaneous
(laminates of polypropylene contg., with polyesters, for food
preservation)
IT 25038-59-9, uses and miscellaneous
(laminates with polyolefins or vinyl polymers, for food
preservation)

L65 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
1977:44252 Document No. 86:44252 Bis(acetylimides) of aromatic
tetracarboxylic acids and crosslinked polyimides based on them.
Babenkova, E. A.; Tsygankova, T. S.; Zaitsev, B. A.; Matrosova, V.
S.; Shtraikhman, G. A. (Inst. Vysokomol. Soedin., Leningrad, USSR).
Vysokomolekulyarnye Soedineniya, Seriya B: Kratkie Soobshcheniya,
18(10), 746-9 (Russian) 1976. CODEN: VYSBAI. ISSN: 0507-5483.
GI



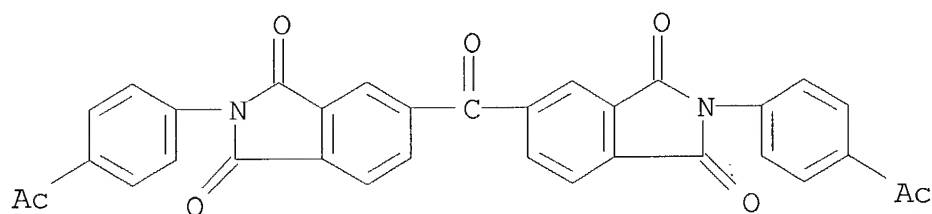
AB Crosslinked, thermally stable polymers were obtained by heating molten I and II ($Z = \text{CO}, \text{O}, \text{CO}_2\text{CO}, m\text{-C}_6\text{H}_4\text{O}_2$) at gradually increasing temps. to 400.degree. during 7-8 h. The IR spectra of the **polymers preserved** the bands typical for the monomers, except for the Ac band; intensity of the latter decreased during the polymn. to a negligible value in hardened products. According to thermogravimetric data 5 and 10% wt. losses of the polymers occurred at 460-500 and 520-30.degree., resp., except for the polymer derived from II ($Z = \text{CO}_2\text{CO}$) [61370-21-6], for which the corresponding temps. were 380 and 420.degree..

IT 61370-19-2P 61370-20-5P 61370-21-6P
61370-22-7P

(prepn. of)

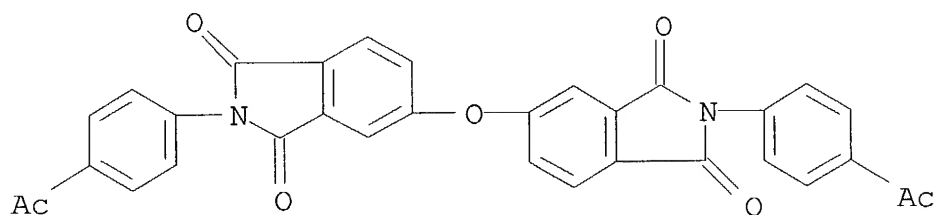
RN 61370-19-2 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 5,5'-carbonylbis[2-(4-acetylphenyl)-
(9CI) (CA INDEX NAME)



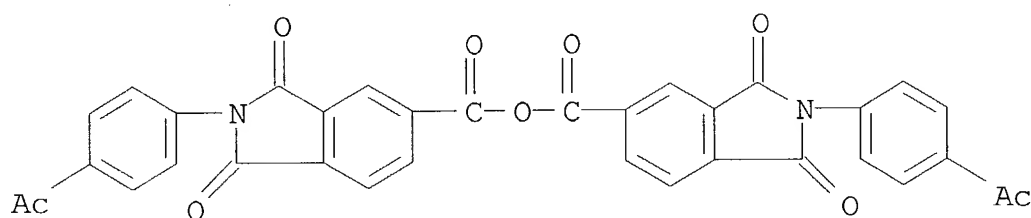
RN 61370-20-5 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 5,5'-oxybis[2-(4-acetylphenyl)- (9CI)
(CA INDEX NAME)



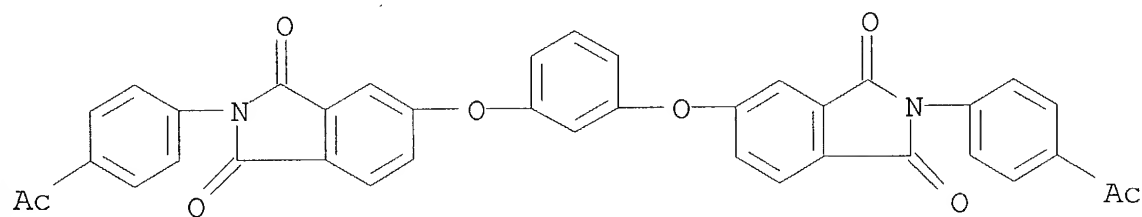
RN 61370-21-6 HCAPLUS

CN 1H-Isoindole-5-carboxylic acid, 2-(4-acetylphenyl)-2,3-dihydro-1,3-dioxo-, anhydride (9CI) (CA INDEX NAME)



RN 61370-22-7 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 5,5'-[1,3-phenylenebis(oxy)]bis[2-(4-acetylphenyl)- (9CI) (CA INDEX NAME)



CC 36-3 (Plastics Manufacture and Processing)

IT 61370-18-1P 61370-19-2P 61370-20-5P

61370-21-6P 61370-22-7P

(prepn. of)

L65 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

1974:15754 Document No. 80:15754 Microbicides for polymer dispersions.

Boetsch, Franz; Braun, Helmut; Fink, Walter; Heller, Friedrich;

Wallhaeuser, Karl H. (Farbwerke Hoechst A.-G.). Ger. Offen. DE

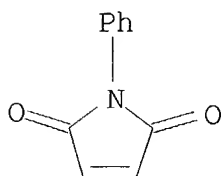
2207199 19730606, 12 pp. (German). CODEN: GWXXBX. APPLICATION: DE

1972-2207199 19720216.

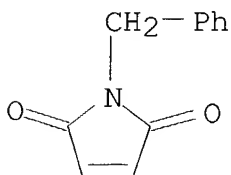
AB Aq. dispersion of polymers, e.g. Bu acrylate-styrene copolymer (I)

[25767-47-9], useful for coatings, were preserved by addn. of 0.1-0.5% antimicrobial maleimide derivs., e.g. N-phenylmaleimide (II) [941-69-5]. Thus, addn. of 0.2% II to a I dispersion (pH 7.4) reduced the no. of test microbes by the factor 102-104 in 14 days.

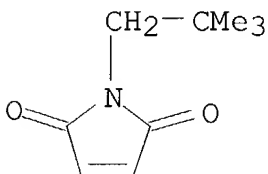
IT 941-69-5 1631-26-1 50906-67-7
 (microbicides, for polymer dispersions)
 RN 941-69-5 HCAPLUS
 CN 1H-Pyrrole-2,5-dione, 1-phenyl- (9CI) (CA INDEX NAME)



RN 1631-26-1 HCAPLUS
 CN 1H-Pyrrole-2,5-dione, 1-(phenylmethyl)- (9CI) (CA INDEX NAME)

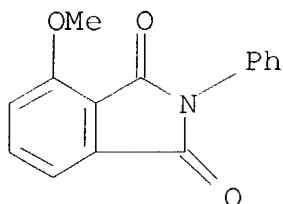


RN 50906-67-7 HCAPLUS
 CN 1H-Pyrrole-2,5-dione, 1-(2,2-dimethylpropyl)- (9CI) (CA INDEX NAME)



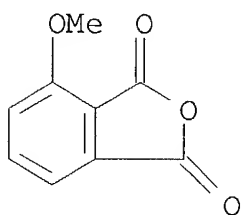
IC C09D
 CC 36-6 (Plastics Manufacture and Processing)
 ST microbicide polymer dispersion; **preservation**
polymer dispersion; acrylate copolymer dispersion
 microbicide; maleimide microbicide polymer dispersion
 IT 941-69-5 1631-26-1 50906-67-7
 (microbicides, for polymer dispersions)

- L65 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN
1954:3624 Document No. 48:3624 Original Reference No. 48:691c-g
Alkaloids of the plants of Papaveraceae family. XI. Oxidation of
isothebaine. Kiselev, V. V.; Konovalova, R. A. (S. Ordzhonikidze
All-Union Chem.-Pharm. Inst., Moscow). Zhurnal Obshchei Khimii, 22,
2233-6 (Unavailable) 1952. CODEN: ZOKHA4. ISSN: 0044-460X.
- AB cf. C.A. 43, 6207h. Oxidation of 3 g. isothebaine in H₂O with 21.9
g. KMnO₄ at room temp., then at 50-60.degree. gave 1.91 g. crude
product, which yielded 0.3 g. 3-methoxyphthalic anhydride, m.
159-60.degree., after sublimation. This heated with PhNH₂ in MePh
gave 3-methoxyphthalanilic acid, melting with foaming 163.degree. on
rapid heating, m. 159-60.degree. on slow heating; on remelting the
product m. 187-9.degree., indicating formation of
3-methoxyphthalanil. Oxidation of 4.35 g. the Me ether of
isothebaine methosulfate by 21.84 g. KMnO₄ in 3-4% soln., as above,
gave 0.22 g. 3-methoxyphthalic anhydride and 0.58 g. product, m.
240-1.degree., on slow heating, decomp. 175-80.degree., on rapid
heating, remelting at 240-1.degree.; this substance C₁₈H₁₆O₉ is
apparently 2,3,2'-trimethoxy-5,6,6'-tricarboxybiphenyl. Treatment
of 4 g. corydine-HCl salt with 12.8 ml. Me₂SO₄ in 30% NaOH gave the
Me ether of corydine methosulfate, m. 247-8.degree. (from EtOH),
which with aq. KI gave the methiodide of corydine, decomp.,
248-9.degree. (from EtOH). Oxidation of the methosulfate with KMnO₄
as above gave an acid, C₁₉H₁₈O₁₀, apparently 5,6,5',6'-
tetramethoxybiphenyl-2,3,3'-tricarboxylic acid, m. about
125.degree., with foaming and immediate resolidification and
remelting at 229-30.5.degree.; on slow heating the material shrinks
at 120-5.degree. and m. 229-30.5.degree.; pure material on slow
heating m. 230-1.degree.. The formation of 3-methoxyphthalic acid
from isothebaine shows the locations of the HO and MeO groups in the
benzene ring of aporphine skeleton (in the tetrahydroisoquinoline
fraction); 1 MeO in the other benzene ring is in 1 or 4 position.
In oxidations with KMnO₄ of **nonphenolic** aporphine
alkaloids the benzene ring in the tetrahydroisoquinoline part of the
structure is **less stable to oxidation**
in alk. medium than the other benzene ring.
- IT 3039-43-8, Phthalimide, 3-methoxy-N-phenyl-
14963-96-3, Phthalic anhydride, 3-methoxy-
(prepn. of)
- RN 3039-43-8 HCAPLUS
- CN 1H-Isoindole-1,3(2H)-dione, 4-methoxy-2-phenyl- (9CI) (CA INDEX
NAME)



RN 14963-96-3 HCAPLUS

CN 1,3-Isobenzofurandione, 4-methoxy- (9CI) (CA INDEX NAME)



CC 10 (Organic Chemistry)

IT 3039-43-8, Phthalimide, 3-methoxy-N-phenyl-
14963-96-3, Phthalic anhydride, 3-methoxy-
(prepn. of)

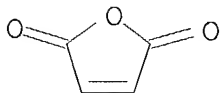
L65 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2004 ACS on STN

1953:34985 Document No. 47:34985 Original Reference No. 47:5951f-h
Alkaloids of Menispermaceae plants. LXXXIV. Hasubanonine. 1. Kondo,
Heisaburo; Satomi, Masakichi; Odera, Toshiko (ITSUU Lab., Tokyo).
Ann. Rept. ITSUU Lab., 2, 1-7;35-43 (English) 1951.

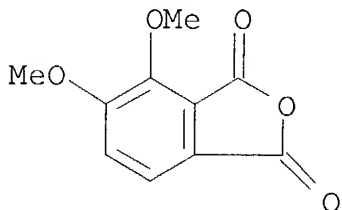
AB A new **nonphenolic** and the 9th base sepd. from *Stephania japonica*, named **hausbanonine (I)** (after the Japanese name of the plant), crystd. from Me-OH in colorless prisms, m. 50-60.degree. (70-5.degree. after repeated recrystn.; **stabilized** at 116.degree. by drying in vacuo), having the compn. C₂₁H₂₉O₅N, contg. 4 MeO groups (2 of which are most likely at the 1,2-positions in the 1st C₆H₆ ring of phenanthrene because I was oxidized to hemipic anhydride) and a CO₂H group (estd. from the oxime), and easily converted to nitrate, picrate, and HBr salt. I.MeI was decompd. by heating with MeOH-KOH to a methine base contg. (MeO)₃ and a phenolic O, which was acetolyzed (not successfully by the Hofmann reaction) with Ac₂O to volatile and nonvolatile amines (the 1st isolated as complex aurate of Me₂NCH₂CH₂OH through the HCl salt, the 2nd, as the Ac deriv. through the methiodide) and a non-N neutral substance, m. 123-4.degree., identified by its color reactions and spectrograph as trimethoxymonoacetoxypheanthrene (I was also dry-distd. with Zn dust to phenanthrene). Hence I seems to have a sinomenine

structure. The positions of the remaining (MeO)₂ and CO₂H are still undetd.

IT 108-31-6, Maleic anhydride
(adducts, with protostephanine and its derivs.)
RN 108-31-6 HCAPLUS
CN 2,5-Furandione (9CI) (CA INDEX NAME)



IT 1567-56-2, Hemipic anhydride
(formation from hasubanonine)
RN 1567-56-2 HCAPLUS
CN 1,3-Isobenzofurandione, 4,5-dimethoxy- (9CI) (CA INDEX NAME)



CC 10 (Organic Chemistry)
IT 108-31-6, Maleic anhydride
(adducts, with protostephanine and its derivs.)
IT 1567-56-2, Hemipic anhydride
(formation from hasubanonine)

=> d 166 1-13 ti

L66 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Alkyl polyglycoside surfactant systems for agriculturally active compounds

L66 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Action modes of unconventional **polymer** heat **stabilizers** - a comparison between 3-arylbenzofuran-2-ones and **phthalides**

L66 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Thermosensitive recording material with high-sensitivity, high-contrast and superior light-fastness

- L66 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI 3-**Benzalphthalides** as UV stabilizers for aromatic polyesters
- L66 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI New routes to poly(benzylenebenzimidazoles)
- L66 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis and characteristics of poly(bisdichloromaleimides)
- L66 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Polyimidines. 7. Synthesis and the polymerization of 3-(p-aminophenyl)-3-**phenylphthalide**
- L66 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Synthesis and study of crosslinked polymers from aliphatic bis(maleimides) and cardo diamines
- L66 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Poly(urethanehydrazides) and poly(urethanesemicarbazides) from hydroxymethyl derivatives of acetyl- and aroylhydrazines
- L66 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Benzalphthalimidines and related compounds. I. Their synthesis, some reactions, and possible use in **polymer stabilization**
- L66 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Heat-**stable polymers**. V. Poly(isoindoloquinazolinediones) and polymers with related structures
- L66 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Pressure-sensitive copy materials
- L66 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Stabilizers for polyvinyl chloride

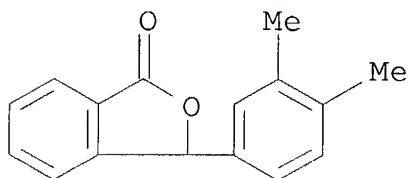
=> d l66 2 4 10 11 13 cbib abs hitstr hitind

- L66 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
2001:220740 Document No. 135:20232 Action modes of unconventional **polymer heat stabilizers** - a comparison between 3-arylbenzofuran-2-ones and **phthalides**. Krohnke, C.; Brede, O.; Epacher, E.; Turcsanyi, B.; Pukanszky, B. (Business Line Polymer Additives, Clariant Huningue S.A., Huningue, F-68331, Fr.).

Phthalides as
polymer
stabilizers

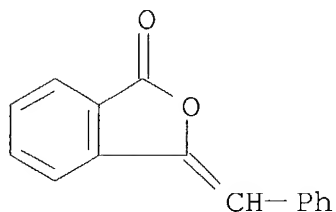
Polymer Preprints (American Chemical Society, Division of Polymer Chemistry), 42(1), 388-389 (English) 2001. CODEN: ACPPAY. ISSN: 0032-3934. Publisher: American Chemical Society, Division of Polymer Chemistry.

- AB Both 3-aryl-benzofuranones (lactones) and 3-aryl-(3H)-isobenzofuran-1-ones (**phthalides**) are effective **polymer stabilizers**, but their performance during polymer processing differs distinctly. To clarify mechanistic differences in the reaction, time resolved methods in soln. at room temp. were used to study radical transients within first nano- and microsecond time intervals for mixts. of stabilizer with polypropylene (Eltex PP PFH-100) and HDPE (Tipelin FA-381). Pulse radiolysis was used to generate radicals by following the sequences of upcoming intermediate products. Lactones (0-10%) in HDPE give rise to partial inversion of degrdn. with chain scission as predominant reaction whereas under the same conditions **phthalides** maintain initial MFI [melt flow index].
- IT 200959-31-5, 3-(3,4-Dimethylphenyl)-1(3H)-isobenzofuranone (radiochem. radical reaction mechanism of aryl-benzofuranone and **phthalide** heat stabilizers for polyolefins)
- RN 200959-31-5 HCAPLUS
- CN 1(3H)-Isobenzofuranone, 3-(3,4-dimethylphenyl)- (9CI) (CA INDEX NAME)

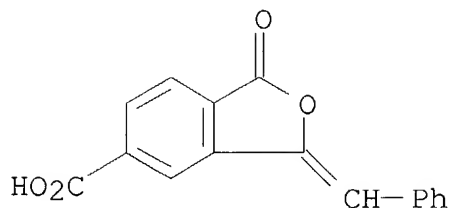


- CC 37-2 (Plastics Manufacture and Processing)
- ST lactone **phthalide** heat stabilizer mechanism polyolefin processing; benzofuranone stabilizer polypropylene degrdn chain scission
- IT Heat stabilizers (radiochem. radical reaction mechanism of aryl-benzofuranone and **phthalide** heat stabilizers for polyolefins)
- IT Polymer degradation (radiochem.; radiochem. radical reaction mechanism of aryl-benzofuranone and **phthalide** heat stabilizers for polyolefins)
- IT Polymer chains (scission; radiochem. radical reaction mechanism of aryl-benzofuranone and **phthalide** heat stabilizers for polyolefins)

- IT 66737-86-8, 5,7-Di-tert-butyl-3-phenyl-3H-benzofuran-2-one
200959-31-5, 3-(3,4-Dimethylphenyl)-1(3H)-isobenzofuranone
(radiochem. radical reaction mechanism of aryl-benzofuranone and
phthalide heat stabilizers for polyolefins)
- IT 9003-07-0, Eltex PHF-100 25213-02-9, Tipelin FA-381-10
(radiochem. radical reaction mechanism of aryl-benzofuranone and
phthalide heat stabilizers for polyolefins)
- L66 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN
1987:638010 Document No. 107:238010 3-**Benzalphthalides** as UV
stabilizers for aromatic polyesters. Scholl, Thomas; Serini,
Volker; Rathmann, Dietrich; Savage, Ross; Kircher, Klaus (Bayer
A.-G., Fed. Rep. Ger.). Ger. Offen. DE 3601900 A1 19870730, 4 pp.
(German). CODEN: GWXXBX. APPLICATION: DE 1986-3601900 19860123.
- AB 3-**Benzalphthalide** (I) and substituted derivs. are
effective UV stabilizers for arom. polyesters, polycarbonates, and
polyester-polycarbonates. Heating phthalic anhydride 1000,
PhCH₂CO₂H 1100, and NaOAc 26 g at 220-240.degree. for 6 h with
distn. of H₂O gave I. A bisphenol A-isophthalic acid-terephthalic
acid-phosgene copolymer contg. 1% I, exposed as a 0.2-mm film to a
Weatherometer, was colorless after 0 and 72 h; vs. light yellow and
yellow, resp., with 2-hydroxy-4-methoxybenzophenone in place of I.
- IT 575-61-1, 3-**Benzalphthalide** 71594-90-6
111672-29-8 111672-30-1
(light stabilizers, for arom. polyesters)
- RN 575-61-1 HCAPLUS
- CN 1(3H)-Isobenzofuranone, 3-(phenylmethylene)- (9CI) (CA INDEX NAME)

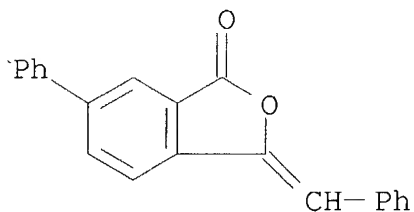


- RN 71594-90-6 HCAPLUS
- CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1-oxo-3-
(phenylmethylene)- (9CI) (CA INDEX NAME)



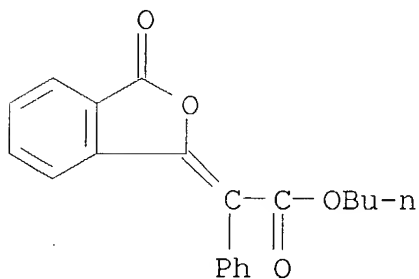
RN 111672-29-8 HCAPLUS

CN 1(3H)-Isobenzofuranone, 6-phenyl-3-(phenylmethylene)- (9CI) (CA INDEX NAME)



RN 111672-30-1 HCAPLUS

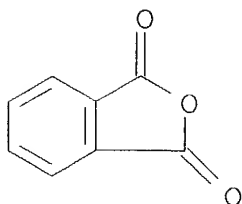
CN Benzeneacetic acid, .alpha.-(3-oxo-1(3H)-isobenzofuranylidene)-, butyl ester (9CI) (CA INDEX NAME)



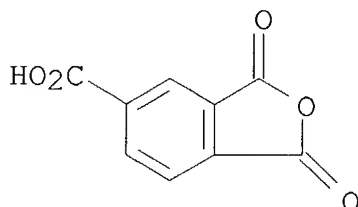
IT 85-44-9, Phthalic anhydride 552-30-7
(reaction of, with phenylacetic acid)

RN 85-44-9 HCAPLUS

CN 1,3-Isobenzofurandione (9CI) (CA INDEX NAME)



RN 552-30-7 HCAPLUS
 CN 5-Isobenzofuran-1-one-3-carboxylic acid, 1,3-dihydro-1,3-dioxo- (9CI) (CA INDEX NAME)



IC ICM C08K005-15
 ICS C08L067-00; C08L069-00
 ICA C08J005-18; C09K015-06; C07D307-88
 CC 37-6 (Plastics Manufacture and Processing)
 Section cross-reference(s): 27
 ST light stabilizer polyester arom; polycarbonate arom light stabilizer; **benzalphthalide** light stabilizer; **phthalide** benzal light stabilizer; phthalic anhydride reaction phenylacetic acid
 IT Light stabilizers
 (**benzalphthalide** derivs., for arom. polyesters)
 IT Polycarbonates, uses and miscellaneous
 Polyesters, uses and miscellaneous
 (arom., light stabilizers for, **benzalphthalide** derivs. as)
 IT Polyesters, uses and miscellaneous
 (polycarbonate-, arom., light stabilizers for, **benzalphthalide** derivs. as)
 IT Polycarbonates, uses and miscellaneous
 (polyester-, arom., light stabilizers for, **benzalphthalide** derivs. as)
 IT 24936-68-3, Bisphenol A-carbonic acid copolymer, sru, uses and miscellaneous 25037-45-0, Bisphenol A-carbonic acid **copolymer** 89001-40-1, Bisphenol A-isophthalic acid-phosgene-terephthalic acid **copolymer**
 (light stabilizers for, **benzalphthalide**)

derivs. as)

- IT 575-61-1, 3-Benzalpthalide 71594-90-6
 111672-29-8 111672-30-1
 (light stabilizers, for arom. polyesters)
 IT 85-44-9, Phthalic anhydride 552-30-7 4445-58-3,
 Biphenyl-3,4-dicarboxylic acid
 (reaction of, with phenylacetic acid)

L66 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN

1971:476367 Document No. 75:76367 Benzalpthalimidines and related compounds. I. Their synthesis, some reactions, and possible use in **polymer stabilization**. Hannout, I. B.; Hassan, E. A.; Islam, A. M.; Ismail, I. M. (Fac. Eng., Al-Azhar Univ., Cairo, Egypt). United Arab Republic Journal of Chemistry, 13(2), 199-212 (English) 1970. CODEN: UAJCAZ. ISSN: 0372-3704.

GI For diagram(s), see printed CA Issue.

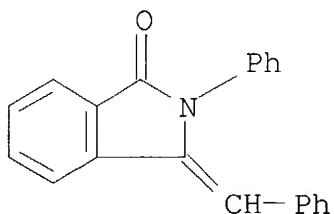
AB Benzalpthalimidines (I), useful as stabilizers for poly(vinyl chloride), were prepd. by condensation of 3-benzalpthalide with aromatic amines in HOAc and some of their corresponding bromides, hydrazides, and phthalimides and derivs. were also prepd. For example, a mixt. of 0.1 mole aniline and 0.1 mole 3-benzalpthalide was treated 8-10 hr with 2 g NaOAc in 400 ml HOAc, giving 2-phenyl-3-benzalpthalimidine (I, R = Ph), of which 0.01 mole was brominated with 0.01 mole Br in CCl₄, giving 79% of the corresponding bromobenzalpthalimidine.

IT 4679-92-9P 5383-82-4P 31604-39-4P
 33238-13-0P 33238-14-1P 33238-15-2P
 33238-16-3P 33238-17-4P 33238-18-5P
 33238-19-6P 33238-20-9P 33238-32-3P
 33238-33-4P 33238-34-5P 33238-35-6P
 33256-90-5P

(prepn. of)

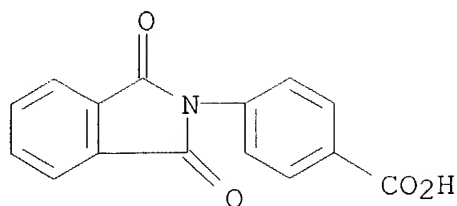
RN 4679-92-9 HCAPLUS

CN 1H-Isoidol-1-one, 2,3-dihydro-2-phenyl-3-(phenylmethylene)- (9CI)
 (CA INDEX NAME)



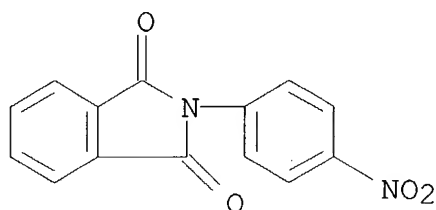
RN 5383-82-4 HCAPLUS

CN Benzoic acid, 4-(1,3-dihydro-1,3-dioxo-2H-isoidol-2-yl)- (9CI) (CA INDEX NAME)



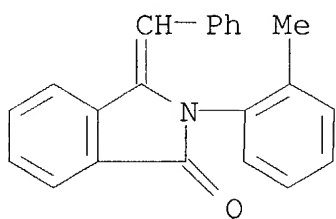
RN 31604-39-4 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



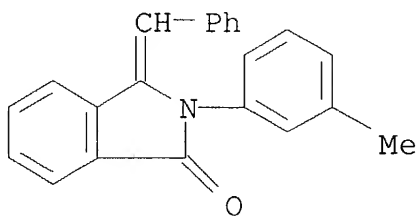
RN 33238-13-0 HCAPLUS

CN 1H-Isoindol-1-one, 2,3-dihydro-2-(2-methylphenyl)-3-(phenylmethylene)- (9CI) (CA INDEX NAME)



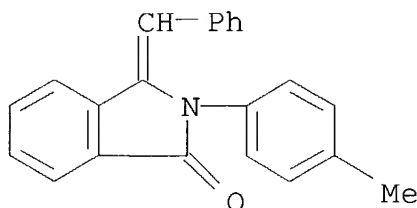
RN 33238-14-1 HCAPLUS

CN 1H-Isoindol-1-one, 2,3-dihydro-2-(3-methylphenyl)-3-(phenylmethylene)- (9CI) (CA INDEX NAME)



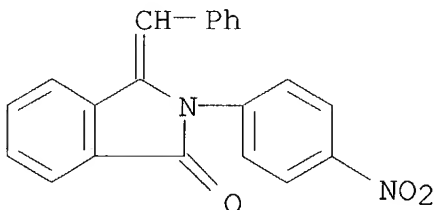
RN 33238-15-2 HCAPLUS

CN 1H-Isoindol-1-one, 2,3-dihydro-2-(4-methylphenyl)-3-(phenylmethylene)- (9CI) (CA INDEX NAME)



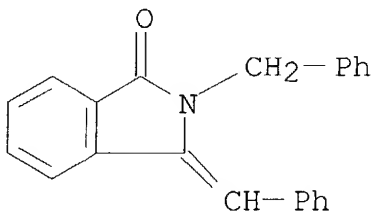
RN 33238-16-3 HCAPLUS

CN 1H-Isoindol-1-one, 2,3-dihydro-2-(4-nitrophenyl)-3-(phenylmethylene)- (9CI) (CA INDEX NAME)



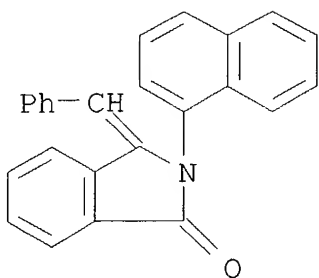
RN 33238-17-4 HCAPLUS

CN 1H-Isoindol-1-one, 2,3-dihydro-2-(phenylmethyl)-3-(phenylmethylene)- (9CI) (CA INDEX NAME)



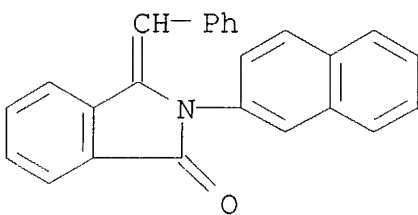
RN 33238-18-5 HCAPLUS

CN 1H-Isoindol-1-one, 2,3-dihydro-2-(1-naphthalenyl)-3-(phenylmethylene)- (9CI) (CA INDEX NAME)



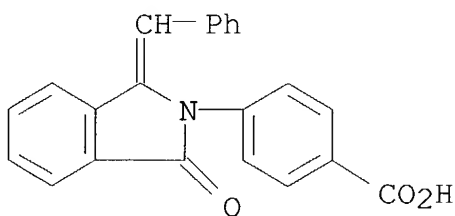
RN 33238-19-6 HCAPLUS

CN 1H-Isoindol-1-one, 2,3-dihydro-2-(2-naphthalenyl)-3-(phenylmethylene)- (9CI) (CA INDEX NAME)



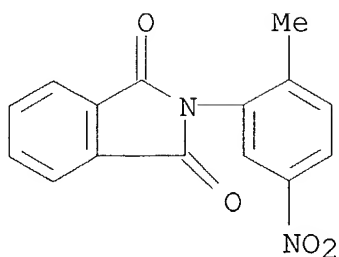
RN 33238-20-9 HCAPLUS

CN Benzoic acid, 4-[1,3-dihydro-1-oxo-3-(phenylmethylene)-2H-isoindol-2-yl]- (9CI) (CA INDEX NAME)



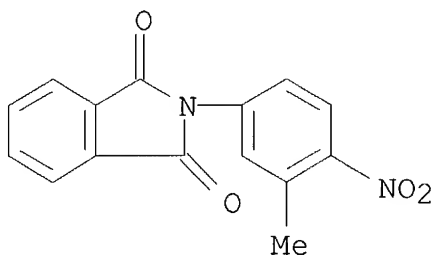
RN 33238-32-3 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-(2-methyl-5-nitrophenyl)- (9CI) (CA INDEX NAME)



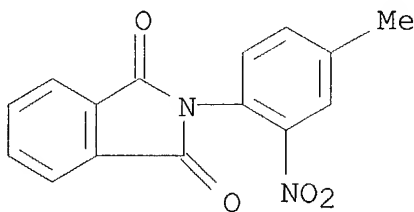
RN 33238-33-4 HCAPLUS

CN Phthalimide, N-(4-nitro-m-tolyl)- (8CI) (CA INDEX NAME)



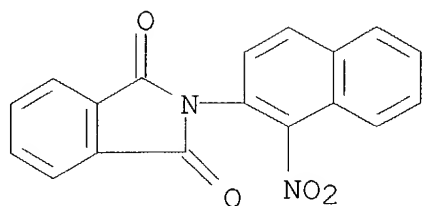
RN 33238-34-5 HCAPLUS

CN Phthalimide, N-(2-nitro-p-tolyl)- (7CI, 8CI) (CA INDEX NAME)



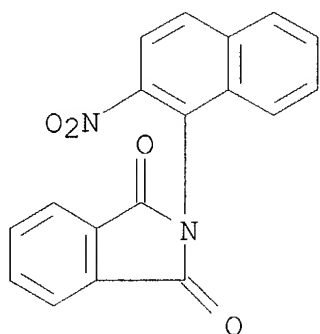
RN 33238-35-6 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-(1-nitro-2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 33256-90-5 HCAPLUS

CN Phthalimide, N-(2-nitro-1-naphthyl)- (8CI) (CA INDEX NAME)



CC 25 (Noncondensed Aromatic Compounds)

IT 4679-92-9P 5383-82-4P 19732-63-9P

31604-39-4P 33238-13-0P 33238-14-1P

33238-15-2P 33238-16-3P 33238-17-4P

33238-18-5P 33238-19-6P 33238-20-9P

33238-21-0P 33238-22-1P 33238-23-2P

33238-26-5P 33238-27-6P 33238-28-7P

33238-32-3P 33238-33-4P 33238-34-5P

33238-35-6P 33238-36-7P 33238-37-8P

33238-39-0P 33238-40-3P 33238-41-4P

33256-87-0P 33256-89-2P

33256-90-5P

(prepn. of)

L66 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN

1967:517374 Document No. 67:117374 Heat-stable

polymers. V. Poly(isoindoloquinazolinonediones) and polymers with related structures. Rabilloud, Guy; Sillion, Bernard; De Gaudemaris, Gabriel (C.E.N., Grenoble, Fr.). Makromolekulare Chemie, 108, 18-51 (French) 1967. CODEN: MACEAK. ISSN: 0025-116X.

GI For diagram(s), see printed CA Issue.

AB AcNMe₂ (25 ml.) contg. 2.72 g. bisanthranilic acid and 2.96 g. phthalic anhydride was kept 30 min. at ambient temp., then refluxed for 6 hrs. to give 3.35 g. 4,4'-diphthalimidobiphenyl-3,3'-

dicarboxylic acid, m. 391.degree.. The same acid was prepd. by heating 500 mg. 4,4'-diphthalimido-3,3'-biphenyldicarboxamide and 15 g. polyphosphoric acid 3 hrs. at 200-20.degree.. The above acid (8.2 g.) was added in portions to 90 ml. H₂O and 15.6 g. Na₂CO₃, the temp. was raised to 70.degree., 13.8 g. p-ClSO₂C₆H₄Me was added in 45 min., the mixt. was heated 30 min. at 70-5.degree., heated to 95.degree., and filtered rapidly to give 16.2 g. 4,4'-bis(p-toluenesulfonamido)biphenyl-3,3'-dicarboxylic acid (I), m. 309-10.degree.. Similarly prepd. was 2,5-bis(p-toluenesulfonamido)terephthalic acid. A soln. of 8.1 g. I in 100 ml. C₆H₆ was treated with 7 g. PCl₅, stirred 1.5 hrs. at 50.degree., cooled to ambient temp., and evapd. to dryness. The residue was dissolved in 120 ml. C₆H₆ and treated 2 hrs. with NH₃ to give 7 g. 4,4'-bis(p-toluenesulfonamido)biphenyl-3,3'-dicarboxamide (II), m. 332.degree.. Similarly prepd. was 2,5-bis(p-toluenesulfonamido)terephthalamide. II (7 g.) in 50 ml. concd. H₂SO₄ was heated for 15 min. at 100.degree., poured over 400-500 g. crushed ice, and neutralized with 12N aq. NH₃ to give 86% 4,4'-diaminobiphenyl-3,3'-dicarboxamide (III), m. 340.degree.. Similarly prepd. was 2,5-diaminoterephthalamide, m. 300.degree.. A mixt. of 20 ml. AcNMe₂ and 3.7 g. phthalic anhydride was treated with 3.4 g. anthranilamide added in 4 portions, stirred 1 hr. at ambient temp., and dild. with H₂O to give 6.7 g. 2-carbamoyl-N-phenylphthalamic acid, m. 212.degree.. This acid (2.8 g.) and 26 ml. 1:1 Ac₂O-pyridine was kept overnight and filtered to give 1.7 g. 2-phthalimidobenzamide, m. 239.degree.. The same product was obtained by cyclization with dicyclohexylcarbodiimide (IV) or by heating the acid in HCONMe₂. Phthalanilic acid (2.4 g.) in 25 ml. AcNMe₂ was treated with 2.06 g. III in 10 ml. AcNMe₂ and kept overnight to give 3-phenyliminophthalide, m. 112-13.degree.. Cyclization of 2-phthalimidobenzamide by heating, Ac₂O, or polyphosphoric acid gave 5H,11H-isoindolo[2,1-a]quinazoline-5,11-dione, m. 242.degree.. Anthranilamide (2.72 g.) in 15 ml. HCONMe₂ was treated with 2.18 g. pyromellitic dianhydride added in small portions, kept 1 hr. at ambient temp., and filtered to give 2.6 g. 4,6-bis[N-(2-carbamoylphenylphenylcarbamoyl)]isophthalic acid or 2,5-bis[N-(2-carbamoylphenylphenylcarbamoyl)]terephthalic acid. A suspension of this compd. (2 g.) in 15 ml. 1:1 Ac₂O-pyridine was stirred for 7 hrs. and kept 48 hrs. at room temp. to give 1.35 g. N,N'-bis(2-carbamoylphenyl)pyromellitimide, m. >400.degree.. This compd. (0.7 g.) was heated for 4 hrs. at 300.degree./0.02 mm. to give 0.5 g. of a residue, m. 444.degree., which was identified as 5H,9H,15H,17H-bisquinazolino[1,2-a:1',2'-a']benzo[1,2-c:5,4-c']dipyrrole-5,9,15,17-tetrone (IVa or IVb). Anthranilamide (0.02 mole) was condensed with 0.01 mole diphenyl ether 3,3',4,4'-tetracarboxylic acid dianhydride (V) to give a condensation product, m. 250.degree., which was treated with Ac₂O-pyridine as above to give 4,4'-oxybis(2-phthalimidobenzamide),

m. 239.degree.. Thermal treatment of this compd. gave VI (X = O), m. 228.degree.. Condensation of anthranilamide and benzophenone-3,3',4,4'-tetracarboxylic acid dianhydride (VII) gave a diacid, m. 325.degree., which was treated with Ac2O-pyridine to give N,N'-di-2-carbamoylbenzophenone-3,3',4,4'-tetracarboxylic diimide, m. 298.degree.. The latter was subjected to thermal treatment to give VI (X = CO), m. 268.degree.. A soln. of 2.96 g. phthalic anhydride in 30 ml. HCONMe2 was treated with 2.7 g. III added in portions and stirred 2 hrs. at ambient temp. to give 4,4'-bis(2-carboxybenzamido)biphenyl-3,3'-dicarboxamide, m. >400.degree.. This compd. was treated with Ac2O-pyridine to give 4,4'-diphthalimidobiphenyl-3,3'-dicarboxamide, m. >400.degree., which was heated in vacuo to give 6H,6',12H,12'H-8,8'-bis(isoindolo[2,1-a]quinazoline)-6,6',12,12'-tetrone, m. >400.degree.. A soln. of 0.97 g. 2,5-diaminoterephthalamide in 20 ml. HCONMe2 was treated with 1.48 g. phthalic anhydride and stirred overnight at ambient temp. to give 2.8 g. 2,5-bis(2-carbobenzamido)terephthalamide, m. >400.degree.. This compd. (1.4 g.) in 15 ml. AcNMe2 was treated with 1.3 g. IV in 10 ml. AcNMe2 and stirred for 15 hrs. to give 2,5-diphthalimidoterephthalamide, m. >400.degree., which was heated as above to give 6H,9H,15H,18H-isoindolo[2,1 - a]isoindolo[1',2':2,3]pyrimido[4,5 - g]quinazoline - 6,9,15,18-tetrone, m. >500.degree.. A mixt. of 0.5406 g. III and 0.4363 g. pyromellitic dianhydride was kept overnight under argon, mixed with 4.7 ml. HCONMe2, stirred 5 hrs., and pptd. in Me2CO to give a III-pyromellitic dianhydride copolymer (VII), .eta.inh (inherent viscosity) 0.92 (0.5% at 30.degree.). VII in 20 ml. AcNMe2 was stirred 15 hrs., treated with 2.5 g. IV in 10 ml. AcNMe2, stirred overnight, and dild. with ether to give a polyimide-amide, .eta.inh 0.84 (0.5% HCONMe2). VII was heated to 250.degree. at 2.degree./min., kept 30.degree. min. at this temp., heated to 400.degree. at 3.degree./min., and kept 30 min. at this temp. to give a 5H,9H,15H,17H-bisquinazolino[1,2-a:1',2'-a']benzo[1,2-c:5,4-c']dipyrrole-5,9,15,17-tetrone polymer, .eta.inh 0.63 (0.5% in H2SO4). Similarly, a III-VII copolymer was cyclized to a polyimide-amide, .eta.inh 0.38 (0.5% in AcNMe2) and treated thermally to give an 8,8'-oxybis(5H,11H-isoindolo[2,1-a]quinazoline-5,11-dion-1-yl) polymer, .eta.inh 0.33 (0.5% in concd. H2SO4). Also, a III-V copolymer, .eta.inh 0.7 (0.5% in HCONMe2) was cyclized to a polyimide-amide, .eta.inh 0.44 (0.5% AcNMe2) and treated thermally to give an 8,8'-oxybis(5H,11H-isoindolo[2,1-a]quinazoline-5,11-dion-1-yl) polymer, .eta.inh 0.52 (0.5% in concd. H2SO4). A pyromellitic dianhydride-2,5-diaminoterephthalamide copolymer, .eta.inh 0.70 (0.5% Me2SO) was cyclized to the polyimide-amide, .eta.inh 0.47 (0.2% Me2SO), and treated thermally to give a ladder polymer, .eta.inh 0.49 (0.5% H2SO4). Cf. CA 64: 19810c.

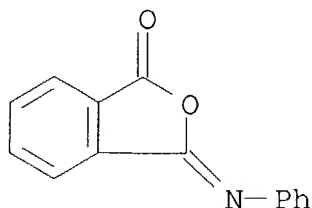
IT 487-42-3P 18257-48-2P 18257-55-1P
18257-83-5P 18257-84-6P 18257-86-8P

18492-13-2P

(prepn. of)

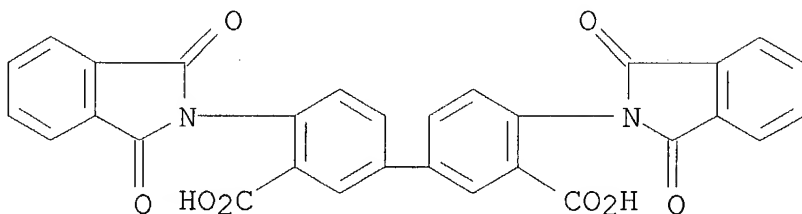
RN 487-42-3 HCAPLUS

CN 1(3H)-Isobenzofuranone, 3-(phenylimino)- (9CI) (CA INDEX NAME)



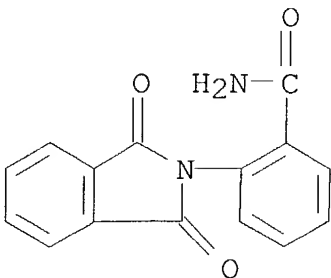
RN 18257-48-2 HCAPLUS

CN 3,3'-Biphenyldicarboxylic acid, 4,4'-diphthalimido- (8CI) (CA INDEX NAME)



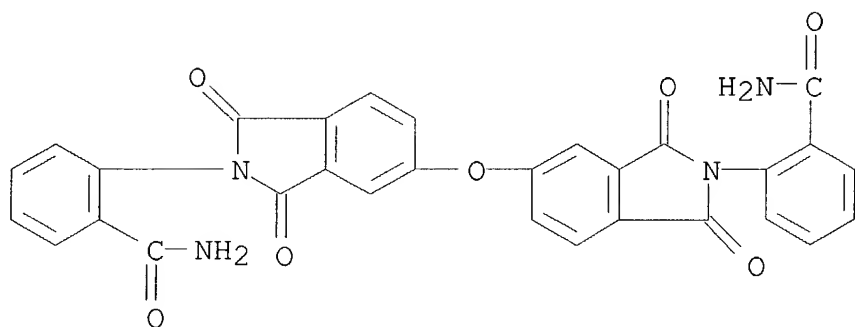
RN 18257-55-1 HCAPLUS

CN Benzamide, 2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)- (9CI) (CA INDEX NAME)



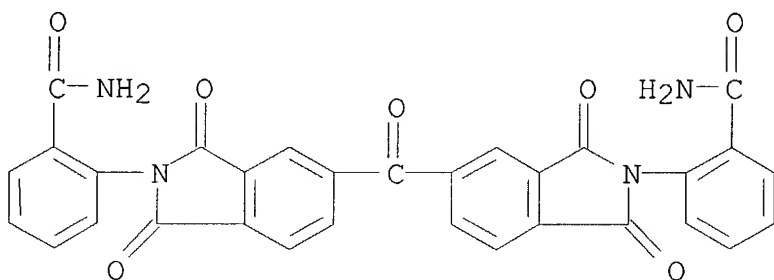
RN 18257-83-5 HCAPLUS

CN Benzamide, 2,2'-[oxybis(1,3-dioxo-2,5-isoindolinediyl)]bis- (8CI) (CA INDEX NAME)



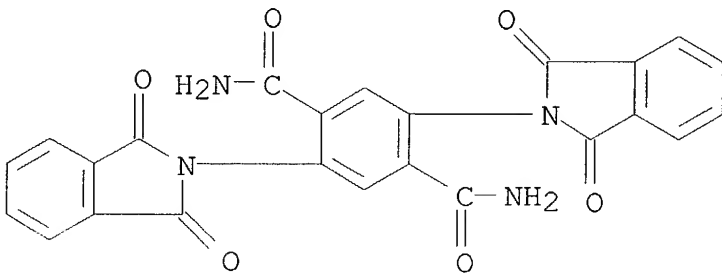
RN 18257-84-6 HCAPLUS

CN Benzamide, 2,2' [carbonylbis(1,3-dioxo-2,5-isoindolinediyl)]bis-
(8CI) (CA INDEX NAME)



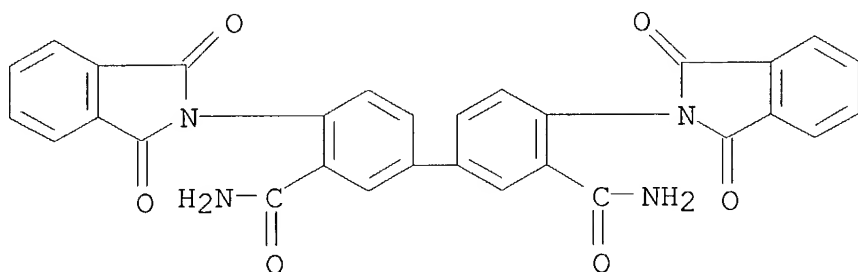
RN 18257-86-8 HCAPLUS

CN Terephthalamide, 2,5-diphthalimido- (8CI) (CA INDEX NAME)



RN 18492-13-2 HCAPLUS

CN 3,3'-Bibenzamide, 6,6'-diphthalimido- (8CI) (CA INDEX NAME)



CC 35 (Synthetic High Polymers)

ST ISOINDOLOQUINAZOLINEDIONE POLYMERS; QUINAZOLINEDIONES POLYISOINDOLO;
POLYISOINDOLOQUINAZOLINEDIONES; HEAT **STABLE**
POLYMERS

IT **Polymers**, preparation
(heat-stable)

IT **487-42-3P** 7486-17-1P 15420-64-1P **18257-48-2P**
18257-49-3P 18257-51-7P 18257-52-8P 18257-54-0P
18257-55-1P 18257-78-8P 18257-79-9P 18257-80-2P
18257-82-4P **18257-83-5P** **18257-84-6P**
18257-85-7P **18257-86-8P** 18257-88-0P 18490-48-7P
18492-12-1P **18492-13-2P** 18492-14-3P 18492-15-4P
28930-24-7P 28930-25-8P 32144-05-1P
(prepn. of)

L66 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2004 ACS on STN

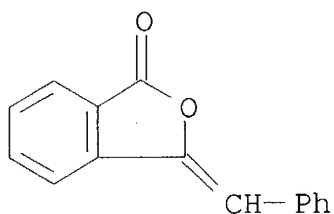
1952:34512 Document No. 46:34512 Original Reference No.

46:5882h-i,5883a Stabilizers for polyvinyl chloride. Rosenberg, A.
Kunststoffe, 42, 41-3 (Unavailable) 1952. CODEN: KUNSAV. ISSN:
0023-5563.

AB The importance of stabilizers for remedying the instability of PVC
plastics is explained from the point of view of form, economy,
efficiency, and toxicity, and methods of testing stabilizers are
described. From the point of view of toxicity stabilizers from urea
are preferable, and new stabilizers were developed by introduction
of an epoxy group into the mol. of a monophenyl urea; in this mol.
there are 2 groups which can react with HCl: (1) the urea group
reacting in the following way: $\text{-NH.CO.NH}_2 \rightarrow \text{-N:C(OH)NH}_2$
 $\rightarrow \text{-N:CClNH}_2$, and (2) the epoxy group reacting with HCl to
form a chlorohydrin. The 2 effective groups of this stabilizer thus
form HCl acceptors which have an advantage over metal salts by
absorbing the Cl of the HCl by forming an org. bond. Another type
of stabilization is obtained by compds. of the
benzalphthalide type, which by themselves do not possess
stabilizing properties in PVC but together with the stearates of Pb,
Cd, Ca, and others improve considerably the action of these known
stabilizers, since the addn. of the **benzalphthalide**

prevents them from becoming opaque in rolling and keeps them clear and transparent.

- IT **575-61-1, Phthalide, 3-benzylidene-**
(derivs., mixts. with stearates, in stabilization of polyvinyl chloride)
- RN 575-61-1 HCAPLUS
- CN 1(3H)-Isobenzofuranone, 3-(phenylmethylene)- (9CI) (CA INDEX NAME)



- CC 31 (Synthetic Resins and Plastics)
- IT Light
(vinyl chloride-polymer stabilization to)
- IT **575-61-1, Phthalide, 3-benzylidene-**
(derivs., mixts. with stearates, in stabilization of polyvinyl chloride)
- IT 57-11-4, Stearic acid
(salts, mixts. with **benzalphthalides**, in stabilization of polyvinyl chloride)
- IT 9002-86-2, Ethylene, chloro-, **homopolymer**
(**stabilizers** for)

=> d 167 1-18 ti

- L67 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
- TI Method for preparing cosmetic gel with thymogen

- L67 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
- TI Furan polymer impregnated wood

- L67 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
- TI Preservative and coloring additive for meat products

- L67 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
- TI Inorganic polymer-based microcapsules with enhanced formulation stability and delivery of topical active ingredients

- L67 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
- TI Oxygen-absorbing composition, oxygen-absorbing **resin**, and **preserving** method

- L67 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Waterborne, biocide-containing coatings for wood
- L67 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Waterborne preservative coatings for wood
- L67 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Wood preservative comprising metal compounds and nitrogen-containing polymers
- L67 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Liquid **preservation** of **polymorphonuclear** leukocytes: effect of various additives on chemotaxis preservation
- L67 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Preservation of produce by gels containing preservatives
- L67 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Transportation and preservation of N-phenylmaleimide with polymerization inhibitors and maleic anhydride
- L67 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Polymeric composition
- L67 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Meat curing compositions and method of use
- L67 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Aqueous agents for preservation of wood
- L67 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Wood **preservation** by organotin **polymers**. I. In situ polymerization of organotin monomers
- L67 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Storage-stable water-dilutable acid adducted epoxy based coating for metal food contact surfaces
- L67 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Chemical preservation of highly moist fodder
- L67 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
TI Interactions between tetracyclines, serum, and the bacterial cell

=> d his 168-

(FILE 'REGISTRY' ENTERED AT 17:18:29 ON 23 JAN 2004)

FILE 'HCAPLUS' ENTERED AT 17:20:12 ON 23 JAN 2004

E ANTIOXIDANTS/CV

L68 54972 S E3
L69 6289 S L28 AND L68
L70 258 S L69 AND L50
L71 258 S L70 AND L30
L72 6 S L70 AND L31
L73 124 S L70 AND L32
L74 1 S L70 AND L37
L75 84 S L70 AND L40
L76 0 S L70 AND L41
L77 43 S L70 AND L42
L78 3 S (L72 OR L74) NOT (L65 OR L66 OR L67)

=> d 178 1-3 cbib abs hitstr hitind

L78 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN

2000:501667 Document No. 133:121343 Gas-barrier packaging laminates for hot-drink containers. Ikenotani, Masakatsu (Tetra Pack Japan K. K., Japan). Jpn. Kokai Tokkyo Koho JP 2000202954 A2 20000725, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-8880 19990118.

AB The laminates consist of a polyolefin outer layer, a fiber substrate layer, a gas-barrier support layer, and a polyolefin inner layer, where anchor coatings between the gas-barrier layer and the polyolefin inner layer contain **preservatives** for hot food. Thus, an Al foil was coated with silicone anchor coatings contg. 10% ascorbic acid Na salt on one side, laminated with LDPE and printed paper on the other side, and sandwiched by LDPE to give a laminate, showing O permeability <5 cm³/m²-24-h-atm (at 23.degree., relative humidity 50%) and no increase of O conc. in green tea (60-75.degree.) stored in a container made of the laminate for 2 mo.

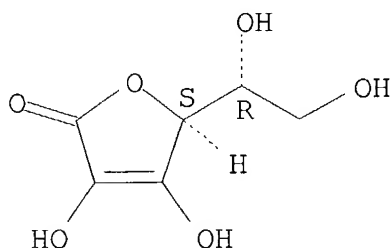
IT 62624-30-0, Ascorbic acid

(**preservatives**, anchor coatings contg.; gas-barrier packaging laminates for hot-drink containers)

RN 62624-30-0 HCAPLUS

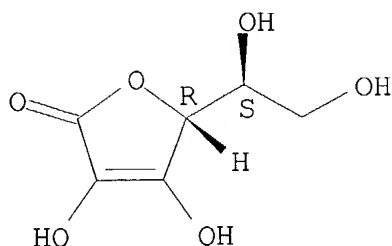
CN Ascorbic acid (9CI) (CA INDEX NAME)

Relative stereochemistry.



- IC ICM B32B027-18
ICS B32B005-00; B32B027-32; B65D005-56; B65D005-62; B65D081-24
- CC **38-3** (Plastics Fabrication and Uses)
Section cross-reference(s): 17
- ST gas barrier laminate hot drink container; polyolefin paper laminate
ascorbic acid **preservative**; LDPE aluminum laminate gas
barrier drink
- IT **Antioxidants**
Paper
(gas-barrier packaging laminates for hot-drink containers)
- IT 1406-18-4, Vitamin E 7317-67-1, L-Ascorbic acid sodium salt
62624-30-0, Ascorbic acid
(**preservatives**, anchor coatings contg.; gas-barrier
packaging laminates for hot-drink containers)
- L78 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
1999:65076 Document No. 130:140320 Polyethylene materials containing
tea leaf powders. Takahashi, Noboru (Takapla K. K., Japan). Jpn.
Kokai Tokkyo Koho JP 11019197 A2 19990126 Heisei, 3 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1997-179722 19970704.
- AB Title materials, showing improved bactericidal and antioxidn. effect
are those prepd. from polyethylene by adding 3-5 phr powd. tea
leaves and 2-3 phr activated C and molding at 110-130.degree..
Polyethylene chips contg. above additives optionally assocd. with
ascorbic acid are suitable for food presertives, etc.
- IT **50-81-7**, Ascorbic acid, uses
(polyethylene materials contg. tea leaf powders, activated
carbon, and optionally ascorbic acid showing bactericidal and
antioxidn. effect)
- RN **50-81-7** HCAPLUS
- CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61L009-01
 ICS A61L009-01; A01N061-00; A01N065-00; A43B017-00; C08K003-04;
 C08K005-15; C08L023-04; A23L003-3472; A61K007-32; C07D311-62;
 C09K015-34; C08L097-00

CC **38-3** (Plastics Fabrication and Uses)
 Section cross-reference(s): 5

IT Antibacterial agents

Antioxidants

Preservatives

(polyethylene materials contg. tea leaf powders, activated carbon, and optionally ascorbic acid showing bactericidal and antioxidn. effect)

IT **50-81-7**, Ascorbic acid, uses
 (polyethylene materials contg. tea leaf powders, activated carbon, and optionally ascorbic acid showing bactericidal and antioxidn. effect)

L78 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
 1997:243865 Document No. 126:278457 Active polymer materials.
 Makarevich, Anna; Pinchuk, Leonid; Kestelman, Vladimir (Academy Science Republic Belarus, Belarus). International Journal of Polymeric Materials, 34(2), 121-131 (English) 1996. CODEN: IJPMCS. ISSN: 0091-4037. Publisher: Gordon & Breach.

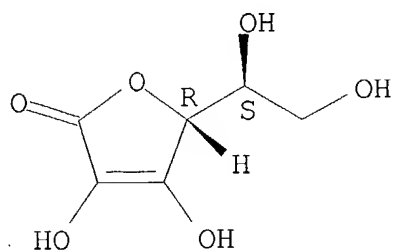
AB The technol. importance of active polymer materials (APM) that exert phys., chem., or biochem. effects on contacting media or other materials is discussed. The exptl. data show high APM efficiency in corrosion prevention, biopurifying, sealing, food packaging, and medicine. The mechanisms of APM effects on compn. and properties of contacting objects are analyzed.

IT **50-81-7**, Ascorbic acid, uses
 (in modified polymer films for food packaging)

RN 50-81-7 HCAPLUS

CN L-Ascorbic acid (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



- CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 17, 60, 63
- IT **Antioxidants**
Corrosion inhibitors
Electrets
Food **preservatives**
(properties of modified polymer films contg.)
- IT 50-81-7, Ascorbic acid, uses
(in modified polymer films for food packaging)